GW-071

DISCHARGE PLAN MODIFICATION

Final Closure Report

DATE:

MAY, 23 2011

RE: South Lined Contact Water Pond Final Closure Report

Lowe, Leonard, EMNRD

From: Smith, David [DRSmith@eprod.com]
Sent: Friday, August 19, 2011 7:09 AM
To: Lowe, Leonard, EMNRD
Cc: Griswold, Jim, EMNRD; Dailey, Aaron; Seale, Runell
Subject: Enterprise Chaco Plant South Pond Closure / GW-071
Attachments: 0410001B-F.wstltr.efs.pdf

Leonard, I have attached a summary of the blow sand disposal at the South Pond that you asked about earlier. Please let me know if you have any other questions during your review. I also learned this week that an agreement was reached with the Navajo regarding access to the area where the Bisti Receiver Tanks are located at this facility. I will be contacting them to determine if we can proceed with additional site work, and will keep the OCD informed. Thanks.

David R. Smith, P.G.
Senior Environmental Scientist
Enterprise Products Operating LLC
1100 Louisiana, Rm 13.036
Houston, TX 77002-5227
Office: (713) 381-2286
Mobile: (713) 501-8136
Email: drsmith@eprod.com

Attachment of Friday, August 19, 2011 E-MAIL

Southwest
GEOSCIENCE
606 S. Rio Grande Avenue, Suite A
Aztec, New Mexico 87410
Ph: (505) 334-5200
Fax: (505) 334-5204

August 12, 2011

Enterprise Field Services, LLC
1100 Louisiana Street, Suite 1000
Houston, Texas 77002
Attn: **Mr. David Smith, P.G.**

Re: Sediment and Blow Sand Disposition
South Lined Contact Water Pond
Chaco Gas Plant
Off County Road 7100
San Juan County, New Mexico

Dear Mr. Smith:

Southwest Geoscience (SWG) appreciates the opportunity to submit this letter detailing the disposition of sediment and blow sand which had accumulated within the south lined-contact water pond prior to closure of the pond in December 2010. The Enterprise Field Services, LLC (Enterprise) Chaco Gas Plant consists of approximately 190-acres of land developed with a cryogenic gas plant, amine treatment unit and natural gas compression facilities, referred to hereinafter as the "Site" or "subject Site". The Site is located at 895 County Road (CR) 7100 in Section 16, Township 26N, Range 12W in San Juan County, New Mexico, approximately 17.5 miles south of Farmington.

The objective of the associated closure activities completed at the Site was to remove the south lined-contact water pond located on the northwest portion of the Site in accordance with the OCD request in the OCD *Discharge Permit Renewal* correspondence dated July 14, 2009.

Prior to the initiation of liner removal activities, an estimated 132 cubic yards of residual sediment and blow sand, which had accumulated within the lined contact-water pond, were removed and stockpiled pending waste analyses. The material was ultimately disposed off-site at Envirotech's landfarm facility near Angel Peak, New Mexico. Prior to acceptance of the waste by Envirotech, SWG characterized the waste for disposal in accordance with applicable state and federal regulations.

A five (5) aliquot sample was collected from the stockpiled soil utilizing a hand auger and a shovel. The soil sample was collected and placed in laboratory prepared glassware, sealed with custody tape and placed on ice in a cooler, which was secured with a custody seal. The sample cooler and completed chain-of-custody form were relinquished to Hall Environmental Analysis Laboratory (Hall) in Albuquerque, New Mexico for standard turnaround.

The sample was analyzed for benzene, toluene, ethylbenzene and total xylenes (BTEX) and total petroleum hydrocarbons gasoline range organics (GRO) and diesel range organics (DRO).

Based on the laboratory analytical results, the soil sample did not exhibit BTEX and/or TPH GRO concentrations above the laboratory's Practical Quantitation Limits (PQLs). However, the sample did exhibit a TPH DRO concentration of 670 mg/Kg, which is above the New Mexico Oil Conservation Division (OCD) guideline of 100 parts per million (ppm) for total petroleum hydrocarbons.

Once the requirement for off-site disposal was established, the Envirotech landfarm

Administrator was contacted to confirm the required analyses for consideration as RCRA Non-Exempt waste. The soil sample was subsequently analyzed by Hall for RCRA-8 metals. Chromium (Cr), Lead (Pb), and Mercury (Hg) exceeded the initial landfarm screening criteria, at which point Envirotech required further evaluation utilizing Toxicity Characteristic Leaching Procedure (TCLP) analysis prior to further consideration for acceptance.

The TCLP analyses results did not indicate Chromium, Lead, or Mercury concentrations above the laboratory PQLs. Therefore, based on the analytical results, the Envirotech landfarm accepted the soil as RCRA Non-Exempt waste On March 22, 2011.

Laboratory results are summarized in the table included in Attachment A. The executed chain-of-custody form and laboratory data sheets are provided in Attachment B. The final Form C-138 and associated Bills-of-Lading are attached to this letter as Attachment C.

If you should have any questions or comments regarding this letter report, please contact the undersigned at (505) 334-5200 or (214) 350-5469 respectively.

Sincerely,
Southwest Geoscience

Kyle Summers, CPG
Manager, Four Corners

B. Chris Mitchell, P.G.
Principal Geoscientist

Southwest GEOSCIENCE

ATTACHMENT A

Tables

Southwest GEOSCIENCE

TABLE 1
CHACO GAS PLANT
Petroleum Hydrocarbons - Waste Characterization Analytical Results - South Pond Sediments

Sample I.D.	Date	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	TPH DRO (mg/Kg)	TPH GRO (mg/Kg)
Chaco SP	02.10.2011	<0.050	<0.050	<0.050	<0.10	670.0	<5.0

TABLE 2
CHACO GAS PLANT
Metals - Waste Characterization Analytical Results - South Pond Sediments

Sample I.D.	Date	Arsenic (mg/Kg)	Barium (mg/Kg)	Cadmium (mg/Kg)	Chromium (mg/Kg)	Lead (mg/Kg)	Selenium (mg/Kg)	Silver (mg/Kg)	Mercury (mg/Kg)	TCLP Mercury (mg/L)	TCLP Chromium (mg/L)	TCLP Lead (mg/L)
Chaco SP	02 10 2011	<2 5	43	<0 10	93	5 2	<2 5	<0 25	12	<0 020	<5 0	<5 0

mg/L - milligrams per liter, µg/Kg - milligrams per kilogram

< - Denotes a concentration was not detected above the laboratory practical quantitation limit

Southwest GEOSCIENCE

ATTACHMENT B

Laboratory Data Reports & Chain-of-Custody Documentation

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Monday, March 14, 2011

Kyle Summers
Southwest Geoscience
606 S. Rio Grande Unit A
Aztec, NM 87410

TEL: (903) 821-5603
FAX

RE: Chaco South Pond

Order No.: 1102338

Dear Kyle Summers:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 2/11/2011 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued February 23, 2011.

No determination of compounds below these (denoted by the ND or < sign) has been made.

Reporting limits are determined by EPA methodology.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Laboratory Manager

NM Lab # NM9425
AZ license # AZ0682
ORELAP Lab # NM100001
Texas Lab# T104704424-08-TX

Hall Environmental Analysis Laboratory, Inc. Date: *14-Mar-11*

CLIENT: Southwest Geoscience
Project: Chaco South Pond
Lab Order: 1102338

CASE NARRATIVE

Analytical Comments for METHOD 8015DRO_S, SAMPLE 1102338-01A: DNOP not recovered due to dilution

Hall Environmental Analysis Laboratory, Inc.

Date: *14-Mar-11*

CLIENT:	Southwest Geoscience	**Client Sample ID:**	Chaco SP
Lab Order:	1102338	**Collection Date:**	2/10/2011 1:10:00 PM
Project:	Chaco South Pond	**Date Received:**	2/11/2011
Lab ID:	1102338-01	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JB**
Diesel Range Organics (DRO)	670	200		mg/Kg	20	2/16/2011 4:08:46 PM
Surr: DNOP	0	81.8-129	S	%REC	20	2/16/2011 4:08:46 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/18/2011 2:15:37 PM
Surr: BFB	90.7	89.7-125		%REC	1	2/18/2011 2:15:37 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.050		mg/Kg	1	2/18/2011 2:15:37 PM
Toluene	ND	0.050		mg/Kg	1	2/18/2011 2:15:37 PM
Ethylbenzene	ND	0.050		mg/Kg	1	2/18/2011 2:15:37 PM
Xylenes, Total	ND	0.10		mg/Kg	1	2/18/2011 2:15:37 PM
Surr: 4-Bromofluorobenzene	93.1	85.3-139		%REC	1	2/18/2011 2:15:37 PM
EPA METHOD 7471: MERCURY						Analyst: **ELS**
Mercury	12	1.7		mg/Kg	50	3/8/2011 11:23:26 AM
MERCURY, TCLP						Analyst: **ELS**
Mercury	ND	0.020		mg/L	1	3/10/2011 12:14:52 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **RAGS**
Arsenic	ND	2.5		mg/Kg	1	3/2/2011 2:58:56 PM
Barium	43	0.10		mg/Kg	1	3/2/2011 2:58:56 PM
Cadmium	ND	0.10		mg/Kg	1	3/2/2011 2:58:56 PM
Chromium	93	1.5		mg/Kg	5	3/2/2011 3:08:42 PM
Lead	5.2	0.25		mg/Kg	1	3/2/2011 2:58:56 PM
Selenium	ND	2.5		mg/Kg	1	3/2/2011 2:58:56 PM
Silver	ND	0.25		mg/Kg	1	3/2/2011 2:58:56 PM
EPA METHOD 6010B: TCLP METALS						Analyst: **ELS**
Chromium	ND	5.0		mg/L	1	3/11/2011 8:09:32 AM
Lead	ND	5.0		mg/L	1	3/11/2011 8:09:32 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Estimated value
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- MCL Maximum Contaminant Level
- NC Non-Chlorinated
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitation Limit
- S Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Southwest Geoscience
Project: Chaco South Pond **Work Order:** 1102338

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8015B: Diesel Range Organics											
Sample ID: MB-25622		*MBLK*				Batch ID: **25622**		Analysis Date:		2/16/2011 9:54:29 AM	
Diesel Range Organics (DRO)	ND	mg/Kg	10								
Sample ID: LCS-25622		*LCS*				Batch ID: **25622**		Analysis Date:		2/16/2011 10:28:36 AM	
Diesel Range Organics (DRO)	47.73	mg/Kg	10	50	0	95.5	66.2	120			
Sample ID: LCSD-25622		*LCSD*				Batch ID: **25622**		Analysis Date:		2/16/2011 11:02:43 AM	
Diesel Range Organics (DRO)	46.42	mg/Kg	10	50	0	92.8	66.2	120	2.78	14.3	
Method: EPA Method 8015B: Gasoline Range											
Sample ID: MB-25606		*MBLK*				Batch ID: **25606**		Analysis Date:		2/17/2011 9:00:23 PM	
Gasoline Range Organics (GRO)	ND	mg/Kg	5.0								
Sample ID: LCS-25606		*LCS*				Batch ID: **25606**		Analysis Date:		2/17/2011 8:31:29 PM	
Gasoline Range Organics (GRO)	26.78	mg/Kg	5.0	25	0	107	95.7	120			
Method: EPA Method 8021B: Volatiles											
Sample ID: 1102338-01AMSD		*MSD*				Batch ID: **25606**		Analysis Date:		2/18/2011 3:13:24 PM	
Benzene	0.8749	mg/Kg	0.050	1	0	87.5	67.2	113	1.39	14.3	
Toluene	0.8831	mg/Kg	0.050	1	0.0079	87.5	62.1	116	1.48	15.9	
Ethylbenzene	0.9030	mg/Kg	0.050	1	0.0113	89.2	67.9	127	0.691	14.4	
Xylenes, Total	2.715	mg/Kg	0.10	3	0	90.5	60.6	134	0.704	12.6	
Sample ID: MB-25606		*MBLK*				Batch ID: **25606**		Analysis Date:		2/17/2011 9:00:23 PM	
Benzene	ND	mg/Kg	0.050								
Toluene	ND	mg/Kg	0.050								
Ethylbenzene	ND	mg/Kg	0.050								
Xylenes, Total	ND	mg/Kg	0.10								
Sample ID: LCS-25606		*LCS*				Batch ID: **25606**		Analysis Date:		2/17/2011 8:02:34 PM	
Benzene	0.9348	mg/Kg	0.050	1	0	93.5	83.3	107			
Toluene	0.9230	mg/Kg	0.050	1	0	92.3	74.3	115			
Ethylbenzene	0.9556	mg/Kg	0.050	1	0.0095	94.6	80.9	122			
Xylenes, Total	2.918	mg/Kg	0.10	3	0.0141	96.8	85.2	123			
Sample ID: 1102338-01AMS		*MS*				Batch ID: **25606**		Analysis Date:		2/18/2011 2:44:31 PM	
Benzene	0.8872	mg/Kg	0.050	1	0	88.7	67.2	113			
Toluene	0.8963	mg/Kg	0.050	1	0.0079	88.8	62.1	116			
Ethylbenzene	0.8968	mg/Kg	0.050	1	0.0113	88.6	67.9	127			
Xylenes, Total	2.734	mg/Kg	0.10	3	0	91.1	60.6	134			
Method: EPA Method 7471: Mercury											
Sample ID: MB-25859		*MBLK*				Batch ID: **25859**		Analysis Date:		3/8/2011 10:36:33 AM	
Mercury	ND	mg/Kg	0.033								
Sample ID: LCS-25859		*LCS*				Batch ID: **25859**		Analysis Date:		3/8/2011 10:38:17 AM	
Mercury	0.1704	mg/Kg	0.033	0.167	0	102	80	120			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Southwest Geoscience
Project: Chaco South Pond **Work Order:** 1102338

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: MERCURY, TCLP											
Sample ID: 1102338-01AMSD		*MSD*				Batch ID:	**25909**	Analysis Date:		3/10/2011 12:18:25 PM	
Mercury	ND	mg/L	0.020	0.005	0	101	75	125	0	20	
Sample ID: MB-25909		*MBLK*				Batch ID:	**25909**	Analysis Date:		3/10/2011 12:11:24 PM	
Mercury	ND	mg/L	0.020								
Sample ID: LCS-25909		*LCS*				Batch ID:	**25909**	Analysis Date:		3/10/2011 12:13:08 PM	
Mercury	ND	mg/L	0.020	0.005	0	100	80	120			
Sample ID: 1102338-01AMS		*MS*				Batch ID:	**25909**	Analysis Date:		3/10/2011 12:16:38 PM	
Mercury	ND	mg/L	0.020	0.005	0	101	75	125			
Method: EPA Method 6010B: Soil Metals											
Sample ID: 1102338-01AMSD		*MSD*				Batch ID:	**25789**	Analysis Date:		3/2/2011 3:03:47 PM	
Arsenic	18.93	mg/Kg	2.5	24.92	1.829	68.6	75	125	18.7	20	S
Cadmium	17.07	mg/Kg	0.10	24.92	0.0554	68.3	75	125	20.2	20	SR
Lead	23.07	mg/Kg	0.25	24.92	5.17	71.8	75	125	19.7	20	S
Selenium	15.99	mg/Kg	2.5	24.92	0	64.2	75	125	20.3	20	SR
Silver	17.57	mg/Kg	0.25	24.92	0	70.5	75	125	20.0	20	S
Sample ID: MB-25789		*MBLK*				Batch ID:	**25789**	Analysis Date:		3/2/2011 2:33:03 PM	
Arsenic	ND	mg/Kg	2.5								
Barium	ND	mg/Kg	0.10								
Cadmium	ND	mg/Kg	0.10								
Chromium	ND	mg/Kg	0.30								
Lead	ND	mg/Kg	0.25								
Selenium	ND	mg/Kg	2.5								
Silver	ND	mg/Kg	0.25								
Sample ID: LCS-25789		*LCS*				Batch ID:	**25789**	Analysis Date:		3/2/2011 2:35:29 PM	
Arsenic	24.55	mg/Kg	2.5	25	0	98.2	80	120			
Barium	24.41	mg/Kg	0.10	25	0	97.7	80	120			
Cadmium	24.83	mg/Kg	0.10	25	0	99.3	80	120			
Chromium	25.11	mg/Kg	0.30	25	0.0521	100	80	120			
Lead	23.72	mg/Kg	0.25	25	0	94.9	80	120			
Selenium	24.19	mg/Kg	2.5	25	0.5441	94.6	80	120			
Silver	25.46	mg/Kg	0.25	25	0	102	80	120			
Sample ID: 1102338-01AMS		*MS*				Batch ID:	**25789**	Analysis Date:		3/2/2011 3:01:21 PM	
Arsenic	15.69	mg/Kg	2.5	24.79	1.829	55.9	75	125			S
Cadmium	13.94	mg/Kg	0.10	24.79	0.0554	56.0	75	125			S
Lead	18.93	mg/Kg	0.25	24.79	5.17	55.5	75	125			S
Selenium	13.04	mg/Kg	2.5	24.79	0	52.6	75	125			S
Silver	14.38	mg/Kg	0.25	24.79	0	58.0	75	125			S

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Southwest Geoscience
Project: Chaco South Pond **Work Order:** 1102338

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 6010B: TCLP Metals											
Sample ID: 1102338-01AMSD		*MSD*				Batch ID: **25910**		Analysis Date:		3/11/2011 8:16:00 AM	
Chromium	ND	mg/L	5.0	0.5	0.0997	102	75	125	0	20	
Lead	ND	mg/L	5.0	0.5	0.1218	95.6	75	125	0	20	
Sample ID: MB-25910		*MBLK*				Batch ID: **25910**		Analysis Date:		3/11/2011 8:04:39 AM	
Chromium	ND	mg/L	5.0								
Lead	ND	mg/L	5.0								
Sample ID: LCS-25910		*LCS*				Batch ID: **25910**		Analysis Date:		3/11/2011 8:07:06 AM	
Chromium	ND	mg/L	5.0	0.5	0	99.3	80	120			
Lead	ND	mg/L	5.0	0.5	0	94.5	80	120			
Sample ID: 1102338-01AMS		*MS*				Batch ID: **25910**		Analysis Date:		3/11/2011 8:11:55 AM	
Chromium	ND	mg/L	5.0	0.5	0.0997	98.5	75	125			
Lead	ND	mg/L	5.0	0.5	0.1218	92.7	75	125			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

CHAIN OF CUSTODY RECORD

Southwest GEOSCIENCE
Environmental & Hydrogeologic Consultants

Office Location: Aztec
Project Manager: K. Summers

Laboratory: Hall
Address: Albuquerque
Contact: Andy Freeman
Phone:
PO/SO #: 04100018

Lab use only
Due Date:
Temp. of coolers when received (C°): 1 | 2 | 3 | 4 | 5
Page 1 of 1

Sampler's Name: Kyle Summers
Sampler's Signature: Kyl L

Proj. No.: 04100018
Project Name: Chaco South Pond

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	No/Type of Containers: VOA	A/G 1 Lt.	250 ml	P/O	ANALYSIS REQUESTED: 8015 TPH Gasoline	8021 BTEX	Lab Sample ID (Lab Use Only)
S	2/10/11	1310	X		Chaco SP						2	X	X	1102338

NFS
KS

Turn around time: ☒ Normal ☐ 25% Rush ☐ 50% Rush ☐ 100% Rush

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
KyL	2/10/11	1600	Mariah Garcia	2/11/11	11:05
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

NOTES:
Added BURAS Rush ASAP 2/12/11
Added TCLP Pb, Cr & Hg 2/15/11

Matrix: WW - Wastewater; W - Water; S - Soil; SD - Solid; L - Liquid; A - Air Bag; C - Charcoal tube; SL - sludge; O - Oil
Container: VOA - 40 ml vial; A/G - Amber / Or Glass 1 Liter; 250 ml - Glass wide mouth; P/O - Plastic or other

Southwest GEOSCIENCE

ATTACHMENT C

Waste Disposal Documentation

envirotech

Bill of Lading

MANIFEST # 38077

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

DATE 3-22-11 JOB# 97057-048

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	Enterprise Chaco Plant	LF III-4	Cont. Soil	F4	6	—	SWFS	216	925	Gene Maestas
2	" "	"	"	F4	6	—	SWFS	216	1025	Gene Maestas
3	" "	"	"	F4	6	—	SWFS	216	1116	Gene Maestas
4	" "	"	"	F4	6	—	SWFS	216	1215	Gene Maestas
5	" "	"	"	F-4	6	—	SWFS	216	1308	Gene Maestas
6	" "	"	"	G4	6	—	SWFS	216	1416	Gene Maestas
					36					

RESULTS:			LANDFARM EMPLOYEE:	NOTES:
11-24-11	CHLORIDE TEST	2	Cory Atkinson	non exempt
	PAINT FILTER TEST	2	Certification of above receival & placement	

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. Southwest Field NAME Gene Maestas SIGNATURE Gene Maestas

COMPANY CONTACT Ken PHONE 326-1001 DATE 3-22-11

Signatures required prior to distribution of this legal document.

ACCENT Printing • Form 28-1212

White - Company Records, Yellow - Billing, Pink - Customer

envirotech

Bill of Lading

MANIFEST # 38075

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

DATE 3-22-11 JOB# 97057-0418

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	Enterprise Chaco Plant	LF II-4	cont soil	F-4	10	—	River Bend	101	9:15	[signature]
2	" "	"	"	F4	10	—	" "	101	1021	[signature]
3	" "	"	"	F4	10	-	" "	101	1114	[signature]
4	" "	"	"	F4	10	-	" "	101	1202	[signature]
5	" "	"	"	F4	10	-	" "	101	1252	[signature]
6	" "	"	"	G4	10	-	" "	101	1352	[signature]
					60					

RESULTS:			LANDFARM EMPLOYEE:	Gary Robinson
497-368	CHLORIDE TEST	2		
	PAINT FILTER TEST	2	Certification of above receival & placement	

NOTES: Notice in loads. Nonexempt

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. River Bend / Southwest Field NAME Brian Perry SIGNATURE [signature]

COMPANY CONTACT Alyce PHONE 330-3430 DATE 3-22-11

Signatures required prior to distribution of this legal document.

White - Company Records, Yellow - Billing, Pink - Customer

ACCENT Printing • Form 28-1212

envirotech

Bill of Lading

MANIFEST # 38091

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

DATE 3-23-11 JOB# 97057-0418

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	Enterprise Chaco Plant	LF II-4	Cont'd Soil	G-4	6	—	SWFS	216	915	Dane Maestas
2	" "	"	"	G-4	6	—	"	216	1020	Dane Maestas
3	" "	"	"	G-4	6	—	"	216	1130	Dane Maestas
4	" "	"	"	H-4	6	—	"	216	1218	Dane Maestas
5	" "	"	"	H-4	6	—	"	216	1310	Dane Maestas
6	" "	"	"	H-4	6	—	"	216	1433	Dane Maestas
					36					

RESULTS:

409, <214 CHLORIDE TEST 2

PAINT FILTER TEST 2

LANDFARM EMPLOYEE: Gary Robinson (acp)

Certification of above receival & placement

NOTES: nonexempt

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. Southwest Field Service NAME Dane Maestas SIGNATURE Dane Maestas

COMPANY CONTACT Ken PHONE 326-1006 DATE 3-23-11

Signatures required prior to distribution of this legal document.

White - Company Records, Yellow - Billing, Pink - Customer

ACCENT Printing • Form 28-1212

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

97057-0418

Form C-138
Revised March 12, 2007

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. **Generator Name and Address:**
Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210

2. **Originating Site:**
Chaco Gas Plant, South Contact Water Pond paykey SF11548 (Sue Fincher)

3. **Location of Material (Street Address, City, State or ULSTR):**
895 CR 7100 San Juan County, NM Sec16, T26N, R12W

4. **Source and Description of Waste:**

Hydrocarbon – bearing soil from removal of South Pond liner. Analytical attached

Estimated Volume 200 yd³ Known Volume (to be entered by the operator at the end of the haul) 132 yd³/ bbls

5. **GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS**

I, David R. Smith, representative or authorized agent for Enterprise Field Services, LLC do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☒ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for Enterprise Field Services, LLC do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. **Transporter:**
Southwest Field Services

OCD Permitted Surface Waste Management Facility
Name and Facility Permit #: Envirotech, Inc. Soil Remediation Facility Permit NM-01-0011

Address of Facility: HW 550/Hilltop – San Juan County, NM

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☒ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: April E Pohl TITLE: Landfarm Administrator DATE: 3-22-11

SIGNATURE: April E Pohl TELEPHONE NO.: 505-632-0615

Surface Waste Management Facility Authorized Agent

DISCHARGE PLAN MODIFICATION (GW-071)

FINAL CLOSURE REPORT
SOUTH LINED CONTACT WATER POND

CHACO GAS PLANT
895 County Road 7100
Section 16, Township 26N, Range 12W
San Juan County, New Mexico

May 23, 2011
SWG Project No. 0410001B

Prepared for:

Enterprise Field Services, LLC
1100 Louisiana Street
Houston, Texas 77002
Attn: Mr. David R. Smith, P.G.

Prepared by:

Kyle Summers, C.P.G.
Senior Geologist/
Manager, Four Corners Office

B. Chris Mitchell, P.G.
Principal Geoscientist

Southwest
GEOSCIENCE
606 S. Rio Grande Avenue
Unit A, Downstairs West
Aztec, NM 87410
Ph: (505) 334-5200
Fax: (505) 334-5204

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FINAL CLOSURE REPORT
SOUTH LINED CONTACT WATER POND

CHACO GAS PLANT
895 County Road 7100
Section 16, Township 26N, Range 12W
San Juan County, New Mexico

SWG Project No. 0410001B

1.0 EXECUTIVE SUMMARY

The Enterprise Field Services, LLC (Enterprise) Chaco Gas Plant consists of approximately 190-acres of land developed with a cryogenic gas plant, amine treatment unit and natural gas compression facilities, referred to hereinafter as the "Site" or "subject Site". The Site is located at 895 County Road (CR) 7100 in Section 16, Township 26N, Range 12W in San Juan County, New Mexico, approximately 17.5 miles south of Farmington.

Specific details regarding the closure activities are further explained in the following sections and should be read to fully comprehend the extent of the activities and results. In addition, findings and recommendations are included in this executive summary for your convenience; however, the remaining text of the report and associated appendices should also be reviewed for a complete understanding of the final closure report.

The objective of the closure activities completed at the Site was to remove the south lined-contact water pond located on the northwest portion of the Site in accordance with the OCD request in the OCD *Discharge Permit Renewal* correspondence dated July 14, 2009. The south lined-contact water pond was constructed utilizing native silty sand soils for containment berms overlain with three (3) liners (top liner – 30 mil impermeable high-density polyethylene, intermediate liner – Fibertex Grade 600 Geotextile liner and bottom liner - 20 mil impermeable high-density polyethylene). A leak detection system was installed underlying the lined contact water pond between the intermediate and bottom liners.

Prior to the initiation of liner removal activities, an estimated 132 cubic yards of residual sediment and blow sand, which had accumulated within the lined contact-water pond, were removed and disposed off-site at Envirotech's landfarm facility near Angel Peak, New Mexico. During the completion of the contact water pond closure activities, each of the three (3) liners associated with the pond were removed, cleaned of debris and residuals, and disposed off-site in accordance with applicable local, state and federal regulations. In addition, piping, valves and related appurtenances associated with the leak detection system, which was located between the intermediate and bottom liners, were removed and disposed off-site.

Subsequent to the removal of the liners and leak detection system from the south lined contact water pond, five (5) soil borings were advanced on-site utilizing a direct push Geoprobe® drilling rig. One (1) soil boring (SB-1) was advanced in the central portion of the contact water pond, and four (4) soil borings (SB-2 through SB-5) were advanced in the vicinity of the pond walls.

The soil samples collected from confirmation boring SB-1 through SB-5 did not exhibit benzene or total BTEX concentrations above the laboratory Practical Quantitation Limit (PQL).

The soil samples collected from confirmation borings SB-2 through SB-5 exhibited TPH concentrations ranging from below the laboratory PQLs to 28 mg/Kg, which are below the OCD *Remediation Action Level* of 100 mg/Kg. The soil sample collected from confirmation boring SB-1 exhibited a TPH DRO concentration of 670 mg/Kg, which exceeds the OCD *Remediation Action Level* of 100 mg/Kg. However, the sample was collected from the capillary fringe zone[1] and, based on:

1.) the absence of visual, olfactory or PID evidence of a release in association with native soils subsequent to the removal of the bottom liner;
2.) the visual inspection of soils during the completion of the confirmation soil borings, which did not indicate the occurrence of a release from the south lined contact water pond,
3.) the absence of TPH DRO concentrations above the laboratory PQLs during historic groundwater monitoring, and;
4.) the laboratory analytical results, which are consistent with the laboratory analytical results of the closure investigation activities completed in 1997 in association with the former industrial ponds and flare pit.

The identified petroleum hydrocarbon concentrations are likely associated with the historic industrial ponds and flare pit, which were granted regulatory closure by the OCD in the "*Request of Closure of Chaco Industrial Ponds and Flare Pit*" letter dated November 17, 1995.

Directly upon completion of liner removal activities, the earthen berms were razed, and the area returned to natural grade. The lined contact water pond area was compacted utilizing the on-Site equipment. The Site is expected to remain in use as a natural gas processing plant and compression facility.

Based on the results of closure activities no additional investigation or remediation appears warranted at this time.

2.0 INTRODUCTION

2.1 Site Description & Background

The Enterprise Chaco Gas Plant consists of approximately 190-acres of land developed with a cryogenic[2] gas plant, amine treatment unit and natural gas compression facilities. The Site is located at 895 County Road (CR) 7100 in Section 16, Township 26N, Range 12W in San Juan County, New Mexico, approximately 17.5 miles south of Farmington.

[1] A zone of tension-saturated soil just above the saturated zone or water table
[2] Cryogenic processes include dropping the temperature of the natural gas stream to around -120 degrees Fahrenheit to extract NGLs from natural gas

Two (2) lined contact water evaporation ponds, referred to as the "north pond" and "south pond", were constructed at the Site in 1994 for the disposal of petroleum contact water generated during natural gas processing operations at the Site. The north and south lined contact water ponds failed integrity testing performed in 1995. Enterprise attempted to repair the identified leaks in the top or primary liner twice before installing a new liner in 1998, which also failed the subsequent integrity testing. The lined contact water ponds were subsequently removed from service in 1998, and petroleum contact water has since been transported off-site for disposal.

A topographic map is included as Figure 1, aerial photographs of the Site and vicinity are included as Figures 2 and 3, and a Site Plan is included as Figure 4 of Appendix A.

2.2 Chronology of Events

Below is a list of significant milestones or events associated with the Site.

May 4, 1987 – El Paso Natural Gas Company (EPNG) submitted a letter to the New Mexico Energy, Minerals and Natural Resource Department, Oil Conservation Division (OCD) providing registration documentation of the nine (9) "unlined" surface impoundments or ponds located at the Chaco Plant. The industrial ponds accepted comingled petroleum contact water and non-contact water generated from gas processing activities.

May 14, 1987 – The OCD issued a letter approving the "pit" registrations provided only produced fluids generated from the fields listed in the registration forms are disposed in the ponds. In addition, the letter stipulates the waste streams must be identified in the "discharge plan application" when a plan is requested.

March 1, 1991 – The OCD formally notifies EPNG that a discharge plan is required for the Chaco Gas Plant in accordance with Water Quality Control Commission (WQCC) regulations.

November 15, 1991 – EPNG submits a Discharge Plan for the Chaco Gas Plant.

March 16, 1992 – EPNG received approval from the OCD to operate a soil remediation site (SRS) at the Chaco Plant to remediate petroleum hydrocarbon impacted soils.

May 18, 1992 – The OCD approved the EPNG Groundwater Discharge Plan for the Chaco Gas Plant.

May 13, 1993 – EPNG submitted a letter to the OCD requesting EPNG be permitted to continue the use of the unlined ponds for non-contact water based on the quality of the waste water discharged, depth to groundwater and Site geology.

August 2, 1993 – The OCD issued a letter requesting additional analysis of cooling tower effluent to the unlined ponds for cadmium. In addition, the OCD requested a groundwater monitoring program be developed in association with any unlined ponds.

November 1993 – Subsequent to the construction of two (2) lined evaporation/disposal ponds, petroleum contact water would be segregated from the non-contact water and routed to the lined ponds. Four (4) monitoring wells (MW-1 through MW-4) were installed in the vicinity of the unlined ponds as part of a Groundwater Discharge Plan modification as requested by the OCD.

August 1, 1994 – EPNG submitted a modification to Groundwater Discharge Plan GW-071. The modification enabled the continued use of industrial ponds #3 through #6 and #8 as non-contact water ponds. At the request of the OCD, EPNG installed three (3) additional monitoring wells (MW-5 through MW-7) to further evaluate 1.) the direction of groundwater flow, 2.) poor groundwater quality in the vicinity of MW-4 and 3.) general groundwater quality characteristics.

August 16, 1994 – EPNG submitted a notification letter to the OCD indicating the intention to construct two (2) lined evaporation/disposal ponds to contain petroleum contact water at the Chaco Gas Plant.

November 22, 1994 – In a letter regarding "*Solid Waste Pit Closures*" the OCD approved the closure plan submitted by EPNG for the solid waste pit located on the southwestern portion of the Chaco Gas Plant provided the soil samples collected from the pit were analyzed for hazardous waste characteristics.

August 10, 1995 – The OCD approved the EPNG "Angel Peak and Chaco Plant *Solid Waste Pit Closure Sampling*" dated June 5, 1995 and the EPNG "*Solid Waste Pit Closures at EPNG's Angel Peak and Chaco Facilities*" dated June 5, 1995 based on EPNG's waste characterization sampling.

October 10, 1995 – EPNG submitted an "*Annual Report of Monitoring well Analyses & Request Approval of Work Plan for Chaco Industrial Ponds and Flare Pit*" to the OCD. EPNG proposed a closure plan for industrial ponds #1 and #2 and the earthen flare pit. The proposed closure plan included the advancement of seven (7) soil borings, including one (1) boring within each of the ponds (industrial pond #1 and #2) and the earthen flare pit. Soil samples would be collected from industrial pond #1 and #2 and the earthen flare pit from 3 to 5 feet bgs. In addition, soil samples would be collected from each boring at total depth. One (1) monitoring well (MW-8) would be installed to the north of the earthen flare pit, near the property boundary, to ensure contaminants were not migrating off-site. The soil and groundwater samples would be analyzed for TPH GRO/DRO, BTEX, polynuclear aromatic hydrocarbons (PAH), RCRA metals and/or cations/anions.

October 13, 1995 – The OCD approved the EPNG "*Annual Report of Monitoring well Analyses & Request Approval of Work Plan for Chaco Industrial Ponds and Flare Pit*".

October 19, 1995 - EPNG submitted a "*Request Major Modification of Discharge Plan GW-071 – Chaco Processing Plant*" to the OCD. The modification was requested to facilitate the addition of a Cryogenic

processing unit to the plant, which greatly increases the production of petroleum contact water.

November 16, 1995 – EPNG submitted a "*Request for Closure of Chaco Industrial Ponds and Flare Pit*". During the completion of closure activities, seven (7) soil borings, including one (1) boring within each of the ponds (industrial pond #1 and #2) and the earthen flare pit were advanced at the Site. Groundwater was not encountered during the installation of monitoring well MW-8; so, the boring was abandoned and an additional monitoring well (MW-8b) was installed to the south, toward the former earthen flare pit. The soil sample collected from soil boring B-5, located within the central portion of industrial pond #1, exhibited a benzene concentration of 2.4 mg/Kg, a toluene concentration of 1.0 mg/Kg, an ethylbenzene concentration of 0.7 mg/Kg, a xylenes concentration of 4.5 mg/Kg and a TPH concentration of 38,400 mg/Kg. The groundwater sample collected from monitoring well MW-8b exhibited a benzene concentration of 29.5 µg/L.

November 17, 1995 – The OCD approved the EPNG "*Request for Closure of Chaco Industrial Ponds and Flare Pit*" pending receipt of a report documenting remediation and closure activities; delineation of groundwater contamination between MW-1 and MW-8b; and, semi-annual sampling of groundwater from monitoring wells MW-1 and MW-8b for BTEX and PAH analysis.

November 17, 1995 – EPNG notified the OCD that the "Ballard Pond" and the two (2) lined contact water evaporation/disposal ponds located at the Chaco Gas Plant had failed an integrity test. Eight (8) leaks were identified within the liner seams of the "Ballard Pond", nineteen (19) leaks in the north contact water ponds and fifteen (15) in the south contact water pond.

January 16, 1997 – El Paso Field Services (EPFS) submitted an annual letter report regarding the sampling of groundwater monitoring wells and waste water streams. According to the EPFS letter, "the analysis for monitoring wells MW-2 through MW-7 did not indicate any abnormally high reading for any analyte. We have been unable to collect a sample from monitoring well MW-1. That well as yet never collected any liquids.

The June 24 sample of the 20 inch waste water discharge line did show a chromium level slightly above the New Mexico Water Quality standards. The chromium level in the sample was 0.132 mg/L."

May 15, 1997 – EPNG submitted a letter work plan to the OCD detailing the results of liner repairs associated with the north and south contact water ponds at the Chaco Plant. The south contact water pond did not exhibit indications of leaks or integrity failures subsequent to repair. The north contact water pond repairs did not pass leak testing subsequent to repair; therefore, EPNG proposed to install two (2) monitoring wells (MW-9 and MW-10), remove the lined pond from service with use only in case of emergency and monitor groundwater from monitoring wells MW-9 and MW-10 for TDS, pH

and BTEX for one year (four (4) quarters), then annually for two (2) additional years.

June 13, 1997 – The OCD approved EPNG's letter work plan dated May 15, 1997 with regard to the proposed installation of two (2) monitoring wells (MW-9 and MW-10), the removal of the lined pond from service with use only in case of emergency and the monitoring of groundwater from monitoring wells MW-9 and MW-10 for TDS, pH and BTEX for one year (four (4) quarters), then annually for two (2) additional years.

August 22, 1997 – Two (2) soil borings/monitoring wells (MW-9 and MW-10) were installed adjacent to the north contact water pond by Philip Services Corporation (PSC) on behalf of EPNG.

February 6, 1998 – EPFS submitted an annual letter report regarding the sampling of groundwater monitoring wells and waste water streams. According to the EPFS letter, "the analysis for monitoring wells MW-2 through MW-7 did not indicate any abnormally high reading for any analyte.

The organic analyses for well 10 indicates high levels of several hydrocarbons. Since there is no hydrocarbon waste disposed on in the lined contact waste water ponds, the source of contamination in well 10 is most likely the old flare pit which was closed in 1994."

February 8, 1999 – EPNG submitted an annual letter report regarding the sampling of groundwater monitoring wells and waste water streams. According to the EPFS letter, "the analysis for monitoring wells MW-2 through MW-7 did not indicate any abnormally high reading for any analyte. Monitoring well MW-10, adjacent to the old flare pit which was closed in 1995, exceeds several water quality standards for organics."

September 9, 1999 – EPNG submitted a minor modification request with regard to Groundwater Discharge Plan GW-071 to the OCD. "Rather than make any further attempts to repair the liner, EPFS has decided to discontinue use of the contact water ponds."

March 22, 2000 – PSC, on behalf of EPFS, prepared a letter report documenting the removal of the plastic liner and closure of the South Chaco Pit. Subsequent to the removal of approximately 430 gallons of sludge from the bottom of the pit, each of the three (3) liners were removed. Soil samples were collected from each wall and the floor of the pit. In addition, soils in the central portion of the pit were excavated to an approximate depth of 12 feet bgs. A soil sample was collected from the bottom of the excavation. The pit was then backfilled and graded to conform to the surrounding topography.

The PSC letter report appears to be associated with the north contact water pond, not the south.

February 2, 2000 – EPFS submitted an annual letter report regarding the sampling of groundwater monitoring wells and waste water streams. According to the EPFS letter, "the analysis for monitoring wells MW-2

through MW-7 did not indicate any abnormally high reading for any analyte. Monitoring well MW-10, adjacent to the old flare pit which was closed in 1995, exceeds several water quality standards for organics.

Monitoring wells MW-1, MW-8b and MW-9 have not exceeded any state limits for organics during 1997, 1998 or 1999. Due to a change in plant operations during 1999, contact wastewater is no longer discharge to on-site ponds. This waste stream is now disposed of off-site in a class 1 underground injection well. The water quality of the non-contact wastewater discharge is such that it would not degrade any waters of the state if the wastewater did percolate to groundwater. Therefore, EPFS requests authorization to cease monitoring the non-contact wastewater and monitoring well MW-1 through MW-9. Due to high levels of BTEX, EPFS will continue to sample monitoring well MW-10 on a quarterly basis."

January 31, 2001 – EPFS submitted an annual letter report regarding the sampling of groundwater monitoring wells and waste water streams. According to the EPFS letter, "the analysis for monitoring wells MW-2 through MW-4, MW-6 and MW-7 did not indicate any abnormally high reading for any analyte. Monitoring well MW-5 tested higher for sulfate than in past sampling. Monitoring well MW-10, adjacent to the old flare pit which was closed in 1995, exceeds several water quality standards for organics."

January 16, 2002 – EPFS submitted an annual letter report regarding the sampling of groundwater monitoring wells and waste water streams. According to the EPFS letter, "the analysis for monitoring wells MW-2, MW-4, MW-6 and MW-7 did not indicate any abnormally high reading for any analyte. Monitoring well MW-3 was dry and could not be sampled. Monitoring well MW-10, adjacent to the old flare pit which was closed in 1995, exceeds several water quality standards for organics."

July 17, 2002 – The New Mexico OCD performed an inspection of the Site and requested a Closure Plan be submitted in association with the South Lined Contact Water Pond.

March 14, 2003 – EPFS submitted an annual letter report regarding the sampling of groundwater monitoring wells and waste water streams. According to the EPFS letter, "The analysis for monitoring well MW-2 showed an elevated level of chlorides. Monitoring wells MW-2, MW-4, MW-6 and MW-7 all had high readings for sulfates. Monitoring well MW-3 was dry and could not be sampled. Monitoring well MW-10, adjacent to the old flare pit which was closed in 1995, exceeds several water quality standards for organics."

March 28, 2005 – Enterprise Field Services, LLC (EFS) submitted an annual letter report regarding the sampling of groundwater monitoring wells and waste water streams.

April 5, 2006 – EFS submitted an annual letter report regarding the sampling of groundwater monitoring wells and waste water streams.

September 27, 2010 – EFS submitted a Closure Plan for the South Lined Contact Water Pond detailing the proposed closure activities.

2.3 Scope of Work

The objective of the closure activities completed at the Site was to remove the south lined-contact water pond located on the northwest portion of the Site in accordance with the OCD request in the OCD *Discharge Permit Renewal* correspondence dated July 14, 2009.

A copy of the OCD *Discharge Permit Renewal* correspondence dated July 14, 2009 is included in Appendix E.

2.4 Standard of Care & Limitations

The findings and recommendations contained in this report represent SWG's professional opinions based upon information derived from on-Site activities and other services performed under this scope of work, and were arrived at in accordance with currently acceptable professional standards. The findings were based, in part, upon analytical results provided by an independent laboratory. Evaluations of the geologic/hydrogeologic conditions at the Site for the purpose of this plan are made from a limited number of available data points (i.e. soil borings and ground water samples) and Site-wide subsurface conditions may vary from those observed at these data points. SWG makes no warranties, express or implied, as to the services performed hereunder. Additionally, SWG does not warrant the work of third parties supplying information used in the report (e.g. laboratories, regulatory agencies, or other third parties).

This report is based upon a specific scope of work requested by Enterprise. The agreement between SWG and Enterprise outlines the scope of work, and only those tasks specifically authorized by that agreement or outlined in this report were performed. This report has been prepared for the intended use of Enterprise and their subsidiaries, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the express written authorization of Enterprise and SWG.

3.0 SITE CHARACTERIZATION

3.1 Geology & Hydrogeology

The Geologic Map of New Mexico (2003), published by the New Mexico Bureau of Geology and Mineral Resources, indicates the Site is located over soils formed from the Nacimiento Formation. The Nacimiento Formation in the area of the Site is composed of shale, siltstone, and sandstone, deposited in floodplain, fluvial and lacustrine settings, and made up of sediment shed from the San Juan uplift to the north and the Brazos-Sangre de Cristo uplift to the east.

The lithologies encountered during the advancement of soil borings MW-1 through MW-10, which were previously completed at the Site, included a brown sand with silt and clay from the surface to a depth of approximately 25 feet bgs. Interbedded grey, yellow and grayish-green silty clay lenses were identified in select borings.

Groundwater was encountered during the installation of the monitoring wells at the Site at depths ranging from 4 to 25 feet bgs. The groundwater depth associated with the initial shallow, unconfined groundwater-bearing unit (Nacimiento Formation) varies depending upon seasonal variations in precipitation and the depth to the initial confining unit. Recharge areas for shallow unconfined units are typically local and can be influenced by surface development of impervious cover (buildings, parking lots, roads). The groundwater flow direction in these unconfined aquifer units is highly variable but is generally toward the nearest down-gradient water body (lakes, creeks, rivers) and can be approximated by observing the surface topography.

The major aquifer underlying the Site vicinity is listed as the Colorado Plateaus Aquifer, which is made up of four smaller aquifers, the Uinta-Animas, the Mesa Verde, the Dakota-Glen, and the Coconino-De Chelly. The general composition of the aquifers are moderately to well-consolidated sedimentary rocks of an age ranging from Permian to Tertiary. Each aquifer is separated from the others by an impermeable confining unit. Two of the confining units are completely impermeable and cover the entire area of the aquifers. The other two confining units are less extensive and are thinner. These units allow water to flow between the principal aquifers. There are countless streams, rivers, and lakes that overlay the Colorado Plateaus Aquifers. The surface water bodies in this region provide a place for the aquifers to discharge. Some of the high altitude rivers and lakes may also provide recharge.

3.2 Surface Water Hydrology

Stormwater from the Site surface flows to a stormwater retention pond located on the southwestern portion of the Site (non-contact water pond #8). The Site vicinity topographically slopes to the west, towards the West Fork of Gallegos Canyon, which flows north to the San Juan River.

3.3 Land Use & Classification

Land use was determined by comparison of existing land use of the Site to the definitions for residential and non-residential (commercial/industrial) land use published in the applicable regulatory guidance. The Site is currently utilized as a gas plant; therefore, commercial/industrial land use is deemed appropriate for the Site.

4.0 LINED CONTACT WATER POND CLOSURE

The closure activities completed at the Site included the removal of the south lined-contact water pond located on the northwest portion of the Site in accordance with the OCD request in the OCD *Discharge Permit Renewal* correspondence dated July 14, 2009. The lined contact water pond that was removed, referred to as the "south lined contact water pond", was installed at the Site in 1995, along with the north contact water pond, formerly located immediately north of the south lined contact water pond.

The south lined-contact water pond was constructed utilizing native silty sand soils for containment berms overlain with three (3) liners (top liner – 30 mil impermeable high-density polyethylene, intermediate liner – Fibertex Grade 600 Geotextile liner

and bottom liner - 20 mil impermeable high-density polyethylene). A leak detection system was installed underlying the lined contact water pond between the intermediate and bottom liners. A copy of the construction plans and "as-builts" for the lined contact water pond are included in Appendix E.

4.1 Liner Removal

Prior to the initiation of liner removal activities, an estimated 132 cubic yards of residual sediment and blow sand, which had accumulated within the lined contact-water pond, were removed and disposed off-site at Envirotech's landfarm facility near Angel Peak, New Mexico.

During the completion of the contact water pond closure activities, each of the three (3) liners associated with the pond were removed, cleaned of debris and residuals, and disposed off-site in accordance with applicable local, state and federal regulations. In addition, piping, valves and related appurtenances associated with the leak detection system, which was located between the intermediate and bottom liners, were removed and disposed off-site.

Figure 3 is a Site Map that depicts the approximate location of the south lined-contact water pond in relation to the existing monitoring well network, pertinent structures and land features (Appendix A). Photographic documentation is provided in Appendix B. Copies of the waste manifest are included in Appendix C.

4.2 Confirmation Sampling

Subsequent to the removal of the liners and leak detection system from the south lined contact water pond, five (5) soil borings were advanced on-site utilizing a direct push Geoprobe® drilling rig. One (1) soil boring (SB-1) was advanced in the central portion of the contact water pond, and four (4) soil borings (SB-2 through SB-5) were advanced in the vicinity of the pond walls. Figure 4 is a Confirmation Boring/Sample Location Map that depicts the approximate location of the confirmation soil borings in relation to the south lined-contact water pond, pertinent structures and land features (Appendix A).

Soil samples were collected continuously utilizing four-foot core barrel samplers to the termination depth of each soil boring. Soil samples were observed to document soil lithology, color, moisture content, and visual and olfactory evidence of petroleum hydrocarbons. Upon retrieval of each core barrel from the borehole, each soil sample was immediately divided into portions designated for field screening or laboratory analysis. Field headspace analysis was conducted by placing the portion of the soil sample designated for field screening into a plastic Ziplock bag. The plastic bag was sealed and then placed in a warm area to promote volatilization. The air above the sample, the headspace, was then evaluated using a photoionization detector (PID) capable of detecting volatile organic compounds (VOCs). The PID was calibrated utilizing an isobutylene standard prior to use in the field.

During the completion of each soil boring, an on-Site geoscientist documented the lithology encountered and constructed a continuous profile of the soil column from the surface to the boring terminus. Undisturbed soil samples from each boring location were visually inspected and classified in the field. The lithology observed during the advancement of soil boring SB-1 at the Site included silty sand and clay stratum from the surface to approximately 8.0 feet below ground surface (bgs). The

lithologies observed in the remaining soil borings (SB-2 through SB-5) were similar to soil boring SB-1. Detailed lithologic descriptions are presented on the soil borings logs included in Appendix D.

Petroleum hydrocarbon odors were identified in the field in soil samples collected from soil boring SB-3, with PID readings ranging from below instrument detection to 339 parts per million (ppm). Significant petroleum hydrocarbon odors and/or PID readings were not detected in the soil samples collected from soil borings SB-1, SB-2, SB-4 or SB-5. Field screening results are presented on soil boring logs included in Appendix B.

Sampling and drilling equipment were cleaned using an Alconox® wash and potable water rinse prior to commencement of the project and between the advancement of each soil boring.

SWG's confirmation soil sampling program consisted of the following:

- Collection of one (1) soil sample from each confirmation soil boring from 1.) the unsaturated zone exhibiting the highest concentration of VOC's based on visual, olfactory or PID evidence, or 2.) from a change in lithology.

The soil samples were collected in laboratory prepared glassware and placed in an iced cooler which were secured with a custody seal. The samples were transported to Hall Environmental Analytical Laboratories, Inc. (HEAL) in Albuquerque, NM along with a completed chain-of-custody form.

The soil samples collected from the confirmation soil borings were analyzed for TPH GRO/DRO utilizing EPA method SW-846 #8015M and BTEX utilizing EPA method SW-846#8021B. A summary of the analysis, sample type, and EPA-approved methods are presented below:

Analysis	Sample Type	Number of Samples	Method
TPH GRO/DRO	Soil	5	SW-846 #8015M
BTEX	Soil	5	SW-846 #8021B

The Site is subject to regulatory oversight by the New Mexico EMNRD OCD. To address activities related to condensate releases, the New Mexico EMNRD OCD utilizes the *Guidelines for Remediation of Leaks, Spills and Releases* as guidance, in addition to the OCD rules, specifically New Mexico Administrative Code (NMAC) 19.15.30 Remediation. These guidance documents establish investigation and abatement action requirements for sites subject to reporting and/or corrective action.

Based on SWG's review of Site characteristics (specifically: average depth to groundwater in the Site vicinity) an associated ranking score of 20 was determined for the Site in accordance with the *Guidelines for Remediation of Leaks, Spills and Releases*. Consequently, the OCD's *Remediation Action Levels* for the on-Site soils are 10 milligrams per kilogram (mg/Kg) benzene, 50 mg/Kg total BTEX, and 100 mg/Kg TPH.

SWG compared the petroleum hydrocarbon constituent concentrations identified in the samples collected from the confirmation soil borings to the to the OCD's *Remediation Action Levels* for sites having a Total Ranking Score of 20.

- The soil samples collected from confirmation boring SB-1 through SB-5 did not exhibit benzene or total BTEX concentration above the laboratory Practical Quantitation Limit (PQL).

- The soil samples collected from confirmation boring SB-1 through SB-5 did not exhibit benzene or total BTEX concentrations above the laboratory PQL.

- The soil samples collected from confirmation borings SB-2 through SB-5 exhibited TPH concentrations ranging from below the laboratory PQLs to 28 mg/Kg, which are below the OCD *Remediation Action Level* of 100 mg/Kg. The soil sample collected from confirmation boring SB-1 exhibited a TPH DRO concentration of 670 mg/Kg, which exceeds the OCD *Remediation Action Level* of 100 mg/Kg. However, the sample was collected from the capillary fringe zone[3] and, based on:

  1.) the absence of visual, olfactory or PID evidence of a release in association with native soils subsequent to the removal of the bottom liner;
  2.) the visual inspection of soils during the completion of the confirmation soil borings, which did not indicate the occurrence of a release from the south lined contact water pond,
  3.) the absence of TPH DRO concentrations above the laboratory PQLs during historic groundwater monitoring, and;
  4.) the laboratory analytical results, which are consistent with the laboratory analytical results of the closure investigation activities completed in 1997 in association with the former industrial ponds and flare pit.

  The identified petroleum hydrocarbon concentrations appear associated with the historic industrial ponds and flare pit, which were granted regulatory closure by the OCD in the "*Request of Closure of Chaco Industrial Ponds and Flare Pit*" letter dated November 17, 1995.

The soil sample analytical results are summarized in Table 1 in Appendix D.

4.3 Site Restoration

Directly upon completion of liner removal activities, the earthen berms were razed, and the area returned to natural grade. The lined contact water pond area was compacted utilizing the on-Site equipment.

4.4 Future Use of Site

The Site is expected to remain in use as a natural gas processing plant and compression facility.

[3] A zone of tension-saturated soil just above the saturated zone or water table

5.0 FINDINGS AND RECOMMENDATIONS

The Enterprise Chaco Gas Plant consists of approximately 190-acres of land developed with a cryogenic gas plant, amine treatment unit and natural gas compression facilities. The Site is located at 895 CR 7100 in Section 16, Township 26N, Range 12W in San Juan County, New Mexico, approximately 17.5 miles south of Farmington. Two (2) lined contact water evaporation ponds, referred to as the "north pond" and "south pond", were constructed at the Site in 1994 for the disposal of petroleum contact water generated during natural gas processing operations at the Site. The north and south lined contact water ponds failed integrity testing performed in 1995. Enterprise attempted to repair the identified leaks in the top or primary liner twice before installing a new liner in 1998, which also failed the subsequent integrity testing. The lined contact water ponds were subsequently removed from service in 1998, and petroleum contact water has since been transported off-site for disposal. The north lined-contact water pond was removed in 2000 under the supervision of PSC.

The objective of the closure activities completed at the Site was to remove the south lined-contact water pond located on the northwest portion of the Site in accordance with the OCD request in the OCD *Discharge Permit Renewal* correspondence dated July 14, 2009. The south lined-contact water pond was constructed utilizing native silty sand soils for containment berms overlain with three (3) liners (top liner – 30 mil impermeable high-density polyethylene, intermediate liner – Fibertex Grade 600 Geotextile liner and bottom liner - 20 mil impermeable high-density polyethylene). A leak detection system was installed underlying the lined contact water pond between the intermediate and bottom liners.

Prior to the initiation of liner removal activities, an estimated 132 cubic yards of residual sediment and blow sand, which had accumulated within the lined contact-water pond, were removed and disposed off-site at Envirotech's landfarm facility near Angel Peak, New Mexico. During the completion of the contact water pond closure activities, each of the three (3) liners associated with the pond were removed, cleaned of debris and residuals, and disposed off-site in accordance with applicable local, state and federal regulations. In addition, piping, valves and related appurtenances associated with the leak detection system, which was located between the intermediate and bottom liners, was removed and disposed off-site.

Subsequent to the removal of the liners and leak detection system from the south lined contact water pond, five (5) soil borings were advanced on-site utilizing a direct push Geoprobe® drilling rig. One (1) soil boring (SB-1) was advanced in the central portion of the contact water pond, and four (4) soil borings (SB-2 through SB-5) were advanced in the vicinity of the pond walls.

The soil samples collected from confirmation boring SB-1 through SB-5 did not exhibit benzene or total BTEX concentration above the laboratory Practical Quantitation Limit (PQL).

The soil samples collected from confirmation borings SB-2 through SB-5 exhibited TPH concentrations ranging from below the laboratory PQLs to 28 mg/Kg, which are below the OCD *Remediation Action Level* of 100 mg/Kg. The soil sample collected from confirmation boring SB-1 exhibited a TPH DRO concentration of 670 mg/Kg, which exceeds the OCD *Remediation Action Level* of 100 mg/Kg. However, the sample was collected from the capillary fringe

zone[4] and the identified petroleum hydrocarbon concentrations are likely associated with the historic flare pit and/or industrial water ponds #1 and #2, which were historically located in the vicinity of the south contact-water pond.

Directly upon completion of liner removal activities, the earthen berms were razed, and the area returned to natural grade. The lined contact water pond area was compacted utilizing the on-Site equipment. The Site is expected to remain in use as a natural gas processing plant and compression facility.

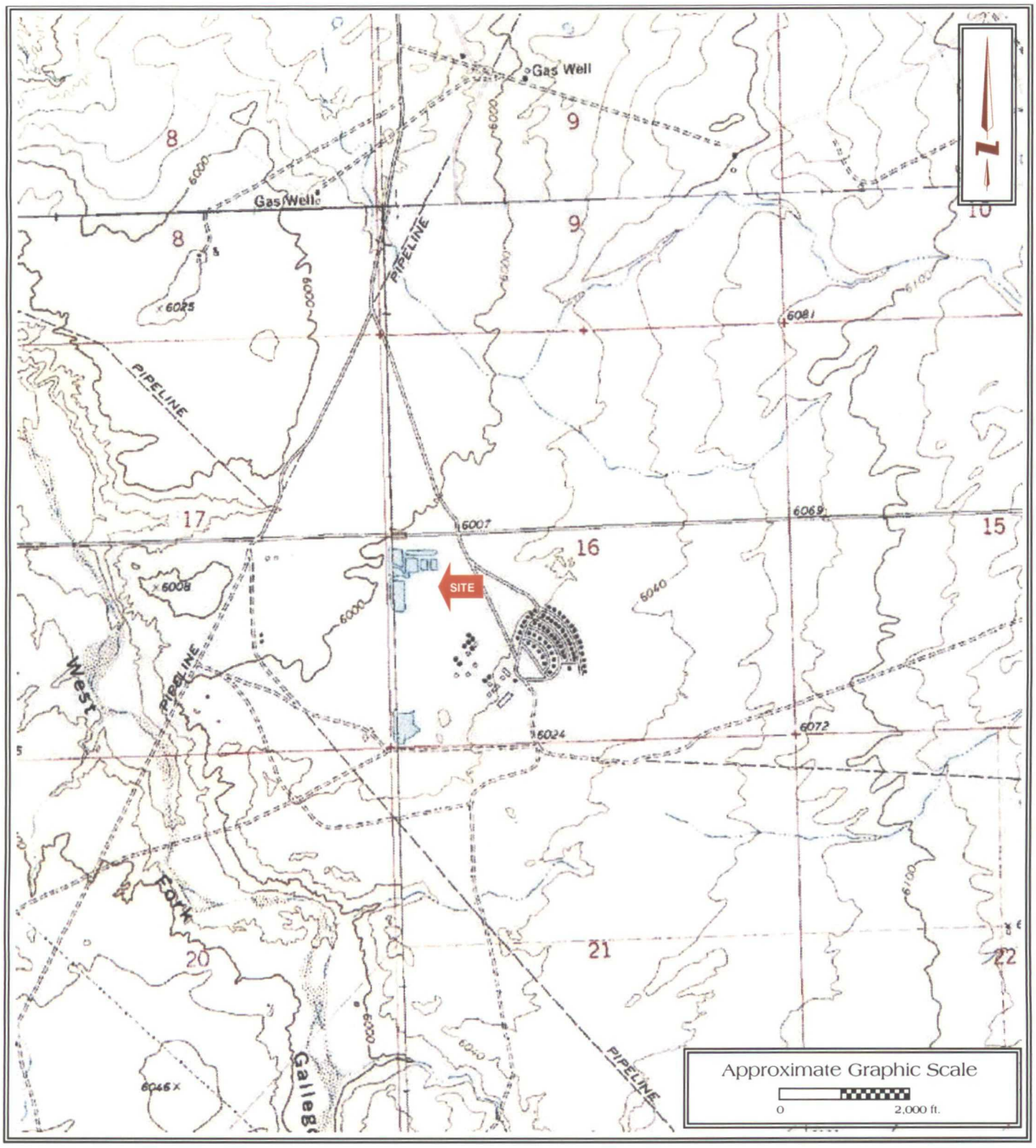
Based on the results of closure activities no additional investigation or remediation appears warranted at this time.

[4] A zone of tension-saturated soil just above the saturated zone or water table

Southwest GEOSCIENCE

APPENDIX A

Figures



Final Closure Report
South Lined Contact Water Pond
Chaco Gas Plant
N36° 29' 09.27"; W108° 07' 28.19"
Off CR 7100
San Juan County, New Mexico
SWG Project No. 0410001B

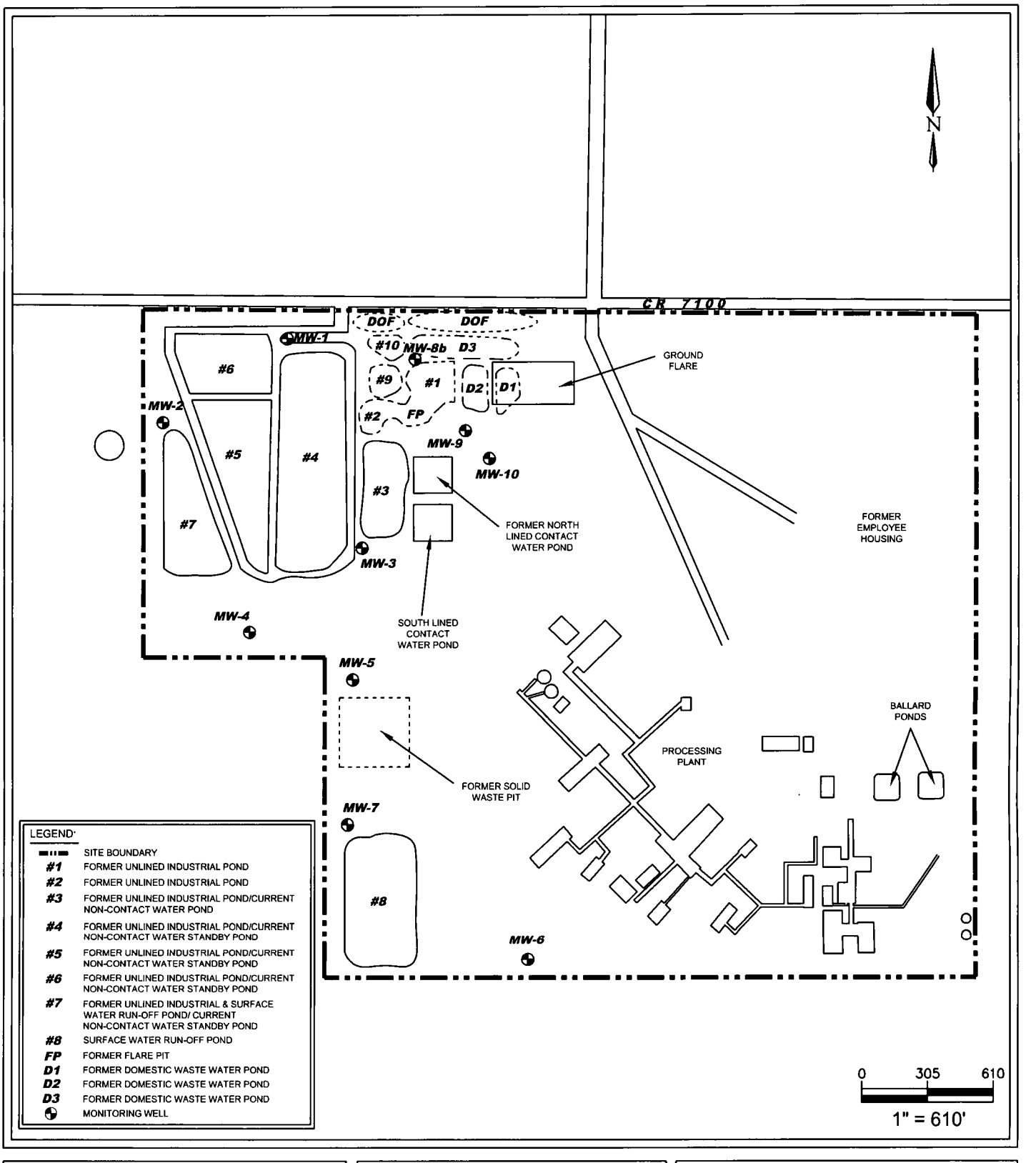
Southwest GEOSCIENCE

FIGURE 1
Topographic Map
Moncisco Wash & Carson
Trading Post, NM Quadrangles
Contour Interval - 10 Feet

Final Closure Report
South Lined Contact Water Pond
Chaco Gas Plant
N36° 29' 09.27"; W108° 07' 28.19"
Off CR 7100
San Juan County, New Mexico
SWG Project No. 0410001B

Southwest GEOSCIENCE

FIGURE 2
Site Vicinity Map
2009 Aerial Photograph



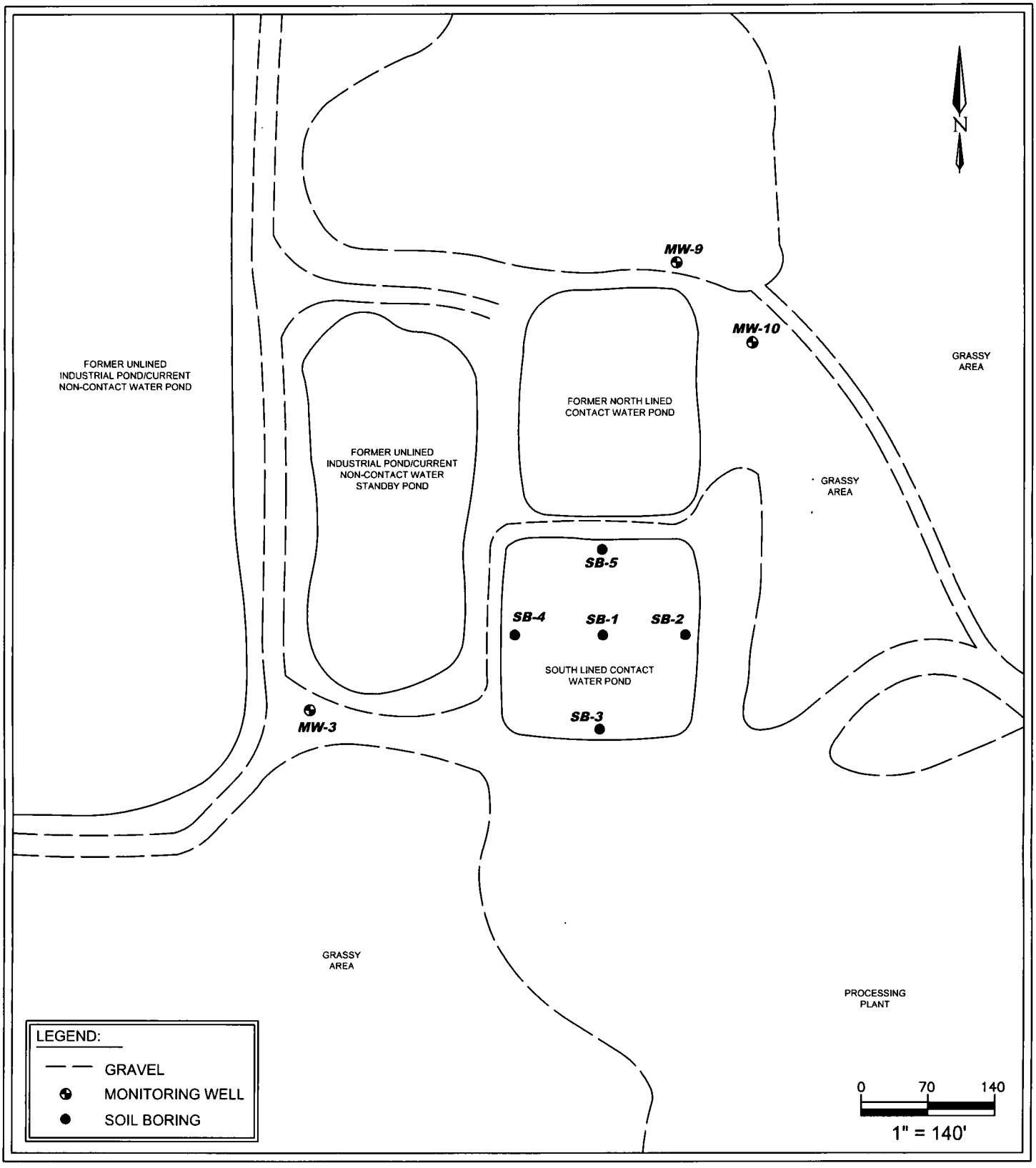
Final Closure Report
Lined Contact Water Pond
Chaco Gas Plant
N36° 29' 09.27"; W108° 07' 28.19"
Off CR 7100
San Juan County, New Mexico

SWG Project No. 0410001B

Southwest GEOSCIENCE

FIGURE 3

SITE MAP



Final Closure Report
South Lined Contact Water Pond
Chaco Gas Plant
N36° 29' 09.27"; W108° 07' 28.19"
Off CR 7100
San Juan County, New Mexico

SWG Project No. 0410001B

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FIGURE 4

CONFIRMATION BORING/ SAMPLE LOCATION MAP

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APPENDIX B

Photographic Documentation

1.) Representative view of the initiation of liner removal activities at the Site.

2.) General view of the removal of the liners from the South Contact Water Pond at the Site.

3.) General view of the liners being loaded for off-site disposal.

4.) Representative view of the initiation of pond backfilling and gradiing activities.

5.) Representative view of the conclusion of Site restoration and grading activities.

6.) General view of the Site subsequent to the completion of Site restoration.

Southwest GEOSCIENCE

APPENDIX C

Waste Disposal Documentation

envirotech

Bill of Lading

MANIFEST # 38077

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

DATE 3-22-11 JOB# 97057-0418

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	Enterprise Chaco Plant	LF III-4	Cont Soil	F4	6	—	SWFS	216	925	Gene Maestas
2	" "	"	"	F4	6	—	SWFS	216	1025	Gene Maestas
3	" "	"	"	F4	6	—	SWFS	216	1116	Gene Maestas
4	" "	"	"	F4	6	—	SWFS	216	1215	Gene Maestas
5	" "	"	"	F-4	6	—	SWFS	216	1308	Gene Maestas
6	" "	"	"	G4	6	—	SWFS	216	1410	Gene Maestas
					36					

RESULTS:

717-294	CHLORIDE TEST	2
	PAINT FILTER TEST	2

LANDFARM EMPLOYEE: Gary Robinson

Certification of above receival & placement

NOTES: nonexempt

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. Southwest Field NAME Gene Maestas SIGNATURE Gene Maestas

COMPANY CONTACT Ken PHONE 326-1001 DATE 3-22-11

Signatures required prior to distribution of this legal document.

ACCENT Printing • Form 28-1212

White - Company Records, Yellow - Billing, Pink - Customer

envirotech

Bill of Lading

MANIFEST # 38075

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

DATE 3-22-11 JOB# 97057-0418

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	Enterprise Chaco Plant	LFII-4	cont soil	F-4	10	—	River Bend	101	9:15	
2	" "	"	"	F4	10	—	" "	101	1027	
3	" "	"	"	F4	10	—	" "	101	1114	
4	" "	"	"	F4	10	—	" "	101	1202	
5	" "	"	"	F4	10	—	" "	101	1252	
6	" "	"	"	G4	10	—	" "	101	1352	
					60					

RESULTS:			LANDFARM EMPLOYEE:	NOTES:
497-36	CHLORIDE TEST	2	Gary Robinson (2)	Notice in loads. None exempt
	PAINT FILTER TEST	2	Certification of above receival & placement	

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. River Bend / Southwest Field NAME Brian Peery SIGNATURE

COMPANY CONTACT Alyce PHONE 330-3430 DATE 3-22-11

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envirotech

Bill of Lading

MANIFEST # 38091

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

DATE 3-23-11 JOB# 97057-0418

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	Enterprise Chaco Plant	LFII-4	Cont Soil	G-4	6	–	SWFS	216	915	Jane Masters
2	" "	"	"	G-4	6	–	"	216	1020	Jane Masters
3	" "	"	"	G-4	6	–	"	216	1130	Jane Masters
4	" "	"	"	H-4	6	–	"	216	1218	Jane Masters
5	" "	"	"	H-4	6	–	"	216	1310	Jane Masters
6	" "	"	"	H-4	6	–	"	216	1433	Jane Masters
					36					

RESULTS:			LANDFARM EMPLOYEE:	NOTES:
409, <244	CHLORIDE TEST	2	Gary Robinson (acp)	nonexempt
	PAINT FILTER TEST	2	Certification of above receival & placement	

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. Southwest Field Service NAME Jane Masters SIGNATURE Jane Masters

COMPANY CONTACT Ken PHONE 326-1006 DATE 3-23-11

Signatures required prior to distribution of this legal document.

White - Company Records, Yellow - Billing, Pink - Customer

ACCENT Printing • Form 28-1212

Southwest GEOSCIENCE

APPENDIX D

Soil Boring Logs

Client: Enterprise Field Services, LLC
Project Name: Chaco GP - South Lined Pond
Project Location: 895 CR 7100, San Juan Cty, NM
Project Manager: B. Chris Mitchell, P.G.

SOIL BORING LOG

DRILLING & SAMPLING INFORMATION

Date Started: December 1, 2010
Date Completed: December 1, 2010
Drilling Company: Earthworx
Driller: Louis Trujillo
Geologist: Kyle Summers
Boring Method: GP
Bore Hole Dia: 3-Inch

Soil Boring / Monitor Well Number: SB-1
Project #: 0410001B
Drawn By: BCM
Approved By: BCM
Well Diam:
Screen Size
Screen Length:
Casing Length:

BORING METHOD
HSA - HOLLOW STEM AUGERS
CFA - CONTINUOUS FLIGHT AUGERS
GP - GEOPROBE
AR - AIR ROTARY

SAMPLER TYPE
CB - FIVE FOOT CORE BARREL
SS - DRIVEN SPLIT SPOON
ST - PRESSED SHELBY TUBE

GROUNDWATER DEPTH
▽ AT COMPLETION
▼ AT WELL STABILIZATION

Monitor Well Detail	SOIL CLASSIFICATION	Stratum Depth	Depth Scale	Sample No	Sample Interval	% Recovery	Groundwater Depth	FID/PID Readings (ppm)	BORING AND SAMPLING NOTES
	SURFACE ELEVATION								
	SILTY SAND, Dark Yellowish Brown, unconsolidated, Dry, No Odor			SB-1 (3-4)		100%	▽	0	
	CLAY, Dark Yellowish Brown, Moist, No Odor							0	
	SILTY SAND, Dark Yellowish Brown, Moist to Wet, No Odor							0	
	CLAY, Dark Yellowish Brown, Wet, No odor							0	
	SILTY SAND, Dark Yellowish Brown, Wet, No odor		5			100%		0	
								0	
	Bottom of Boring							0	
			10						
			15						

Southwest GEOSCIENCE

Client: Enterprise Field Services, LLC
Project Name: Chaco GP - South Lined Pond
Project Location: 895 CR 7100, San Juan Cty, NM
Project Manager: B. Chris Mitchell, P.G.

SOIL BORING LOG

DRILLING & SAMPLING INFORMATION

Date Started: December 1, 2010
Date Completed: December 1, 2010
Drilling Company: Earthworx
Driller: Louis Trujillo
Geologist: Kyle Summers
Boring Method: GP
Bore Hole Dia.: 3-Inch

Soil Boring / Monitor Well Number: SB-2
Project #: 04100018
Drawn By: BCM
Approved By: BCM
Well Diam:
Screen Size:
Screen Length:
Casing Length:

BORING METHOD
HSA - HOLLOW STEM AUGERS
CFA - CONTINUOUS FLIGHT AUGERS
GP - GEOPROBE
AR - AIR ROTARY

SAMPLER TYPE
CB - FIVE FOOT CORE BARREL
SS - DRIVEN SPLIT SPOON
ST - PRESSED SHELBY TUBE

GROUNDWATER DEPTH
▽ AT COMPLETION
▼ AT WELL STABILIZATION

Monitor Well Detail	SOIL CLASSIFICATION	Stratum Depth	Depth Scale	Sample No	Sample Interval	% Recovery	Groundwater Depth	FID/PID Readings (ppm)	BORING AND SAMPLING NOTES
	SURFACE ELEVATION.								
	SILTY SAND, Dark Yellowish Brown, Dry to Wet, No Odor							0	
								0	
								1	
				SB-2 (3-4)		100%		1	
			5				▽	0	Dark Staining from ~4.5' to 7'
	-Thin CLAY seam at ~6 feet							30	
						100%		27	
								10	
	Bottom of Boring		10						
			15						

Southwest GEOSCIENCE

Client Enterprise Field Services, LLC
Project Name: Chaco GP - South Lined Pond
Project Location: 895 CR 7100, San Juan Cty, NM
Project Manager: B. Chris Mitchell, P.G.

SOIL BORING LOG

DRILLING & SAMPLING INFORMATION

Date Started: December 1, 2010
Date Completed: December 1, 2010
Drilling Company: Earthworx
Driller: Louis Trujillo
Geologist: Kyle Summers
Boring Method: GP
Bore Hole Dia.: 3-Inch

Soil Boring / Monitor Well Number: SB-3
Project #: 04100018
Drawn By: BCM
Approved By: BCM
Well Diam.:
Screen Size:
Screen Length:
Casing Length:

BORING METHOD
HSA - HOLLOW STEM AUGERS
CFA - CONTINUOUS FLIGHT AUGERS
GP - GEOPROBE
AR - AIR ROTARY

SAMPLER TYPE
CB - FIVE FOOT CORE BARREL
SS - DRIVEN SPLIT SPOON
ST - PRESSED SHELBY TUBE

GROUNDWATER DEPTH
▽ AT COMPLETION
▼ AT WELL STABILIZATION

Monitor Well Detail	SOIL CLASSIFICATION	Stratum Depth	Depth Scale	Sample No	Sample Interval	% Recovery	Groundwater Depth	FID/PID Readings (ppm)	BORING AND SAMPLING NOTES
	SURFACE ELEVATION.								
	SILTY SAND, Moderate Yellowish Brown, dry to moist, No Odor			SB-3 (2-3)		100%	▽	1	
								1	
								2	
	SILTY CLAY, Dark Yellowish Brown, Wet, No odor		5					339	
	SAND, Black, Wet, Petroleum Odor					100%			
	Bottom of Boring		10						
			15						

Southwest GEOSCIENCE

Client Enterprise Field Services, LLC
Project Name: Chaco GP - South Lined Pond
Project Location 895 CR 7100, San Juan Cty, NM
Project Manager B. Chris Mitchell, P.G.

SOIL BORING LOG

DRILLING & SAMPLING INFORMATION

Date Started: December 1, 2010
Date Completed: December 1, 2010
Drilling Company: Earthworx
Driller: Louis Trujillo
Geologist Kyle Summers
Boring Method GP
Bore Hole Dia 3-Inch

Soil Boring / Monitor Well Number SB-4
Project # 04100018
Drawn By: BCM
Approved By: BCM

Well Diam
Screen Size
Screen Length
Casing Length

BORING METHOD
HSA - HOLLOW STEM AUGERS
CFA - CONTINUOUS FLIGHT AUGERS
GP - GEOPROBE
AR - AIR ROTARY

SAMPLER TYPE
CB - FIVE FOOT CORE BARREL
SS - DRIVEN SPLIT SPOON
ST - PRESSED SHELBY TUBE

GROUNDWATER DEPTH
▽ AT COMPLETION
▼ AT WELL STABILIZATION

Monitor Well Detail	SOIL CLASSIFICATION	Stratum Depth	Depth Scale	Sample No	Sample Interval	% Recovery	Groundwater Depth	FID/PID Readings (ppm)	BORING AND SAMPLING NOTES
	SURFACE ELEVATION:								
	SILTY SAND, Moderate Yellowish Brown, Moist to 1.0' then Wet, No odor			SB-4 (0-1)		100%	▽	15	
								12	
								2	
								12	
	Bottom of Boring		5						
			10						
			15						

Southwest GEOSCIENCE

Client: Enterprise Field Services, LLC
Project Name: Chaco GP - South Lined Pond
Project Location: 895 CR 7100, San Juan Cty, NM
Project Manager: B. Chris Mitchell, P.G.

SOIL BORING LOG

DRILLING & SAMPLING INFORMATION

Date Started: December 1, 2010
Date Completed: December 1, 2010
Drilling Company: Earthworx
Driller: Louis Trujillo
Geologist: Kyle Summers
Boring Method: GP
Bore Hole Dia: 3-Inch

Soil Boring / Monitor Well Number: SB-5
Project #: 04100018
Drawn By: BCM
Approved By: BCM

Well Diam:
Screen Size
Screen Length:
Casing Length

BORING METHOD
HSA - HOLLOW STEM AUGERS
CFA - CONTINUOUS FLIGHT AUGERS
GP - GEOPROBE
AR - AIR ROTARY

SAMPLER TYPE
CB - FIVE FOOT CORE BARREL
SS - DRIVEN SPLIT SPOON
ST - PRESSED SHELBY TUBE

GROUNDWATER DEPTH
▽ AT COMPLETION
▼ AT WELL STABILIZATION

Monitor Well Detail	SOIL CLASSIFICATION	Stratum Depth	Depth Scale	Sample No	Sample Interval	% Recovery	Groundwater Depth	FID/PID Readings (ppm)	BORING AND SAMPLING NOTES
	SURFACE ELEVATION:								
	SILTY SAND, Moderate Yellowish Brown, Dry to Wet, No Odor			SB-5 (2-3)		100%	▽	13 12 2 12	Black staining @ ~ 4'
	Bottom of Boring		5 10 15						

Southwest GEOSCIENCE

Southwest GEOSCIENCE

APPENDIX E

Tables

Southwest GEOSCIENCE

TABLE 1
CHACO GAS PLANT - SOUTH LINED CONTACT WATER POND
CONFIRMATION SOIL ANALYTICAL RESULTS

Sample I.D.	Date	Sample Depth (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)
New Mexico Energy, Minerals & Natural Resources Department, Oil Conservation Division, Remediation Action Level			10	NE	NE	NE	50	100	
Conf. SB-1	12 1 10	3 to 4	<0 05	<0 05	<0 05	<0.05	<.25	<5 0	**670**
Conf. SB-2	12.1.10	3 to 4	<0.05	<0.05	<0.05	<0 05	<.25	<5.0	<10
Conf SB-3	12.1.10	2 to 3	<0.05	<0.05	<0.05	<0 05	< 25	<5 0	<10
Conf SB-4	12 1 10	0 to 1	<0 05	<0 05	<0 05	<0.05	<.25	<5 0	28
Conf. SB-5	12.1.10	2 to 3	<0 05	<0.05	<0.05	<0.05	< 25	<5.0	<10

Note Concentrations in **bold** and yellow exceed the applicable OCD Remediation Action Level
NA = Not Analyzed
ND = Not Detected
NE = Not Established
p = Dual column results percent difference >40%

Southwest GEOSCIENCE

APPENDIX F

Laboratory Data Reports & Chain-of-Custody Documentation

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Friday, December 10, 2010

Kyle Summers
Southwest Geoscience
606 S. Rio Grande Unit A
Aztec, NM 87410

TEL: (903) 821-5603
FAX

RE: Chaco South Pond

Order No.: 1012144

Dear Kyle Summers:

Hall Environmental Analysis Laboratory, Inc. received 5 sample(s) on 12/3/2010 for the analyses presented in the following report.

This report is an addendum to the report dated December 9, 2010. This is an updated report.

No determination of compounds below these (denoted by the ND or < sign) has been made.

Reporting limits are determined by EPA methodology.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Laboratory Manager

NM Lab # NM9425
AZ license # AZ0682
ORELAP Lab # NM100001
Texas Lab# T104704424-08-TX

Hall Environmental Analysis Laboratory, Inc. **Date:** *10-Dec-10*

CLIENT: Southwest Geoscience
Project: Chaco South Pond
Lab Order: 1012144

CASE NARRATIVE

Analytical Comments for METHOD 8015DRO_S, SAMPLE 1012144-01A: DNOP not recovered due to dilution.

Hall Environmental Analysis Laboratory, Inc.

Date: *10-Dec-10*

CLIENT:	Southwest Geoscience	**Client Sample ID:**	Conf. SB-1
Lab Order:	1012144	**Collection Date:**	12/1/2010 12:30:00 PM
Project:	Chaco South Pond	**Date Received:**	12/3/2010
Lab ID:	1012144-01	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	670	100		mg/Kg	10	12/5/2010 12:18:50 PM
Surr: DNOP	0	81.8-129	S	%REC	10	12/5/2010 12:18:50 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/7/2010 2:38:09 AM
Surr: BFB	102	89.7-125		%REC	1	12/7/2010 2:38:09 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	12/7/2010 2:38:09 AM
Benzene	ND	0.050		mg/Kg	1	12/7/2010 2:38:09 AM
Toluene	ND	0.050		mg/Kg	1	12/7/2010 2:38:09 AM
Ethylbenzene	ND	0.050		mg/Kg	1	12/7/2010 2:38:09 AM
Xylenes, Total	ND	0.10		mg/Kg	1	12/7/2010 2:38:09 AM
Surr: 4-Bromofluorobenzene	113	88.9-151		%REC	1	12/7/2010 2:38:09 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *10-Dec-10*

CLIENT:	Southwest Geoscience	**Client Sample ID:**	Conf. SB-3
Lab Order:	1012144	**Collection Date:**	12/1/2010 12:40:00 PM
Project:	Chaco South Pond	**Date Received:**	12/3/2010
Lab ID:	1012144-02	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/5/2010 1:56:18 AM
Surr: DNOP	86.9	81.8-129		%REC	1	12/5/2010 1:56:18 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/7/2010 3:08:06 AM
Surr: BFB	95.0	89.7-125		%REC	1	12/7/2010 3:08:06 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	12/7/2010 3:08:06 AM
Benzene	ND	0.050		mg/Kg	1	12/7/2010 3:08:06 AM
Toluene	ND	0.050		mg/Kg	1	12/7/2010 3:08:06 AM
Ethylbenzene	ND	0.050		mg/Kg	1	12/7/2010 3:08:06 AM
Xylenes, Total	ND	0.10		mg/Kg	1	12/7/2010 3:08:06 AM
Surr: 4-Bromofluorobenzene	103	88.9-151		%REC	1	12/7/2010 3:08:06 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *10-Dec-10*

CLIENT:	Southwest Geoscience	**Client Sample ID:**	Conf. SB-2
Lab Order:	1012144	**Collection Date:**	12/1/2010 1:15:00 PM
Project:	Chaco South Pond	**Date Received:**	12/3/2010
Lab ID:	1012144-03	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/5/2010 2:29:53 AM
Surr: DNOP	88.3	81.8-129		%REC	1	12/5/2010 2:29:53 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/7/2010 3:38:12 AM
Surr: BFB	94.6	89.7-125		%REC	1	12/7/2010 3:38:12 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	12/7/2010 3:38:12 AM
Benzene	ND	0.050		mg/Kg	1	12/7/2010 3:38:12 AM
Toluene	ND	0.050		mg/Kg	1	12/7/2010 3:38:12 AM
Ethylbenzene	ND	0.050		mg/Kg	1	12/7/2010 3:38:12 AM
Xylenes, Total	ND	0.10		mg/Kg	1	12/7/2010 3:38:12 AM
Surr: 4-Bromofluorobenzene	102	88.9-151		%REC	1	12/7/2010 3:38:12 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *10-Dec-10*

CLIENT:	Southwest Geoscience	**Client Sample ID:**	Conf. SB-5
Lab Order:	1012144	**Collection Date:**	12/1/2010 1:35:00 PM
Project:	Chaco South Pond	**Date Received:**	12/3/2010
Lab ID:	1012144-04	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/5/2010 3:03:29 AM
Surr: DNOP	87.1	61.8-129		%REC	1	12/5/2010 3:03:29 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/8/2010 2:55:33 PM
Surr: BFB	87.8	89.7-125	S	%REC	1	12/8/2010 2:55:33 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	12/8/2010 2:55:33 PM
Benzene	ND	0.050		mg/Kg	1	12/8/2010 2:55:33 PM
Toluene	ND	0.050		mg/Kg	1	12/8/2010 2:55:33 PM
Ethylbenzene	ND	0.050		mg/Kg	1	12/8/2010 2:55:33 PM
Xylenes, Total	ND	0.10		mg/Kg	1	12/8/2010 2:55:33 PM
Surr: 4-Bromofluorobenzene	101	88.9-151		%REC	1	12/8/2010 2:55:33 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Estimated value
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- MCL Maximum Contaminant Level
- NC Non-Chlorinated
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitation Limit
- S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *10-Dec-10*

CLIENT:	Southwest Geoscience	**Client Sample ID:**	Conf. SB-4
Lab Order:	1012144	**Collection Date:**	12/1/2010 2:00:00 PM
Project:	Chaco South Pond	**Date Received:**	12/3/2010
Lab ID:	1012144-05	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	28	10		mg/Kg	1	12/5/2010 3:37:07 AM
Surr: DNOP	90.4	61.8-129		%REC	1	12/5/2010 3:37:07 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/8/2010 3:25:40 PM
Surr: BFB	90.2	89.7-125		%REC	1	12/8/2010 3:25:40 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	12/8/2010 3:25:40 PM
Benzene	ND	0.050		mg/Kg	1	12/8/2010 3:25:40 PM
Toluene	ND	0.050		mg/Kg	1	12/8/2010 3:25:40 PM
Ethylbenzene	ND	0.050		mg/Kg	1	12/8/2010 3:25:40 PM
Xylenes, Total	ND	0.10		mg/Kg	1	12/8/2010 3:25:40 PM
Surr: 4-Bromofluorobenzene	102	88.9-151		%REC	1	12/8/2010 3:25:40 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Southwest Geoscience
Project: Chaco South Pond **Work Order:** 1012144

Analyte	Result	Units	PQL	SPK Val	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8015B: Diesel Range Organics											
Sample ID: MB-24736		*MBLK*				Batch ID:	**24736**	Analysis Date:		12/3/2010 7:01:08 AM	
Diesel Range Organics (DRO)	ND	mg/Kg	10								
Sample ID: LCS-24736		*LCS*				Batch ID:	**24736**	Analysis Date:		12/3/2010 7:35:01 AM	
Diesel Range Organics (DRO)	43.46	mg/Kg	10	50	0	86.9	66.2	120			
Sample ID: LCSD-24736		*LCSD*				Batch ID:	**24736**	Analysis Date:		12/3/2010 8:08:52 AM	
Diesel Range Organics (DRO)	41.91	mg/Kg	10	50	0	83.8	66.2	120	3.62	14.3	
Method: EPA Method 8015B: Gasoline Range											
Sample ID: MB-24745		*MBLK*				Batch ID:	**24745**	Analysis Date:		12/7/2010 5:10:15 AM	
Gasoline Range Organics (GRO)	ND	mg/Kg	5.0								
Sample ID: LCS-24745		*LCS*				Batch ID:	**24745**	Analysis Date:		12/6/2010 7:37:05 PM	
Gasoline Range Organics (GRO)	26.24	mg/Kg	5.0	25	0	105	95.7	120			
Method: EPA Method 8021B: Volatiles											
Sample ID: MB-24745		*MBLK*				Batch ID:	**24745**	Analysis Date:		12/7/2010 5:10:15 AM	
Methyl tert-butyl ether (MTBE)	ND	mg/Kg	0.10								
Benzene	ND	mg/Kg	0.050								
Toluene	ND	mg/Kg	0.050								
Ethylbenzene	ND	mg/Kg	0.050								
Xylenes, Total	ND	mg/Kg	0.10								
Sample ID: LCS-24745		*LCS*				Batch ID:	**24745**	Analysis Date:		12/6/2010 9:07:17 PM	
Methyl tert-butyl ether (MTBE)	1.004	mg/Kg	0.10	1	0	100	65.5	229			
Benzene	1.050	mg/Kg	0.050	1	0	105	83.3	107			
Toluene	0.9881	mg/Kg	0.050	1	0	98.8	74.3	115			
Ethylbenzene	1.068	mg/Kg	0.050	1	0	107	80.9	122			
Xylenes, Total	3.266	mg/Kg	0.10	3	0	109	85.2	123			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

CHAIN OF CUSTODY RECORD

Southwest GEOSCIENCE
Environmental & Hydrogeologic Consultants

Office Location: Aztec

Project Manager: Mitchell / Summers

Laboratory: Hall
Address: 4901 Hawkins Albuquerque, NM
Contact: Andy Freeman
Phone: 505 345 3975
PO/SO #: 0410001A

Sampler's Name: Kyle Summers
Sampler's Signature:

Proj. No.: 0410001A
Project Name: Choco South Pond

Lab use only
Due Date:

Temp. of coolers when received (C°): 3

Page 1 of 1

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	No/Type of Containers: VOA	A/G 1 Lt.	250 ml	P/O	ANALYSIS REQUESTED: 8015 TPH GRO/DRO	8021 BTEX	Lab Sample ID (Lab Use Only)
S	12/1/10	1230		X	Conf. SB-1	3	4				1	X	X	1012144-1
↓	12/1/10	1240		X	Conf. SB-3	2	3					↓	↓	-2
	12/1/10	1315		X	Conf SB-2	3	4							-3
	12/1/10	1335		X	Conf SB-5	2	3							-4
↓	12/1/10	1400		X	Conf SB-4	0	1					↓		-5
					NFS									
					NS									

Turn around time: ☒ Normal ☐ 25% Rush ☐ 50% Rush ☐ 100% Rush

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	12/2/10	1245		12/3/10	925
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

NOTES:

Matrix: WW - Wastewater; W - Water; S - Soil; SD - Solid; L - Liquid; A - Air Bag; C - Charcoal tube; SL - sludge; O - Oil
Container: VOA - 40 ml vial; A/G - Amber / Or Glass 1 Liter; 250 ml - Glass wide mouth; P/O - Plastic or other

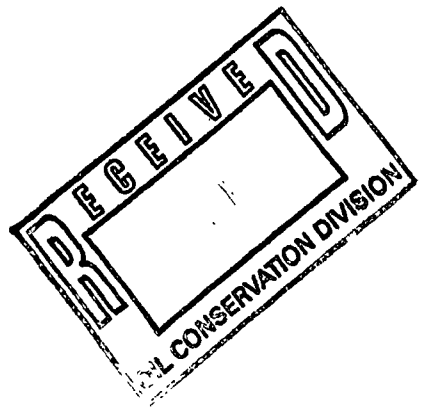
Southwest GEOSCIENCE

APPENDIX G

Supporting Documentation

El Paso
Natural Gas Company

P O BOX 4990
FARMINGTON, NEW MEXICO 87499



May 3, 1995

Mr. Roger Anderson
New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe, NM 87504

Re: **Contact Water Ponds at El Paso Natural Gas Company's Chaco Plant**

Dear Mr. Anderson:

Enclosed are the "As Builts" for the contact water ponds at Chaco Plant. As per the August 16, 1994 letter to NMOCD requesting approval for construction, EPNG agreed to submit the drawings to NMOCD upon completion.

Should you have questions or need further information, please do not hesitate to call at (505) 599-2175.

Thank you,

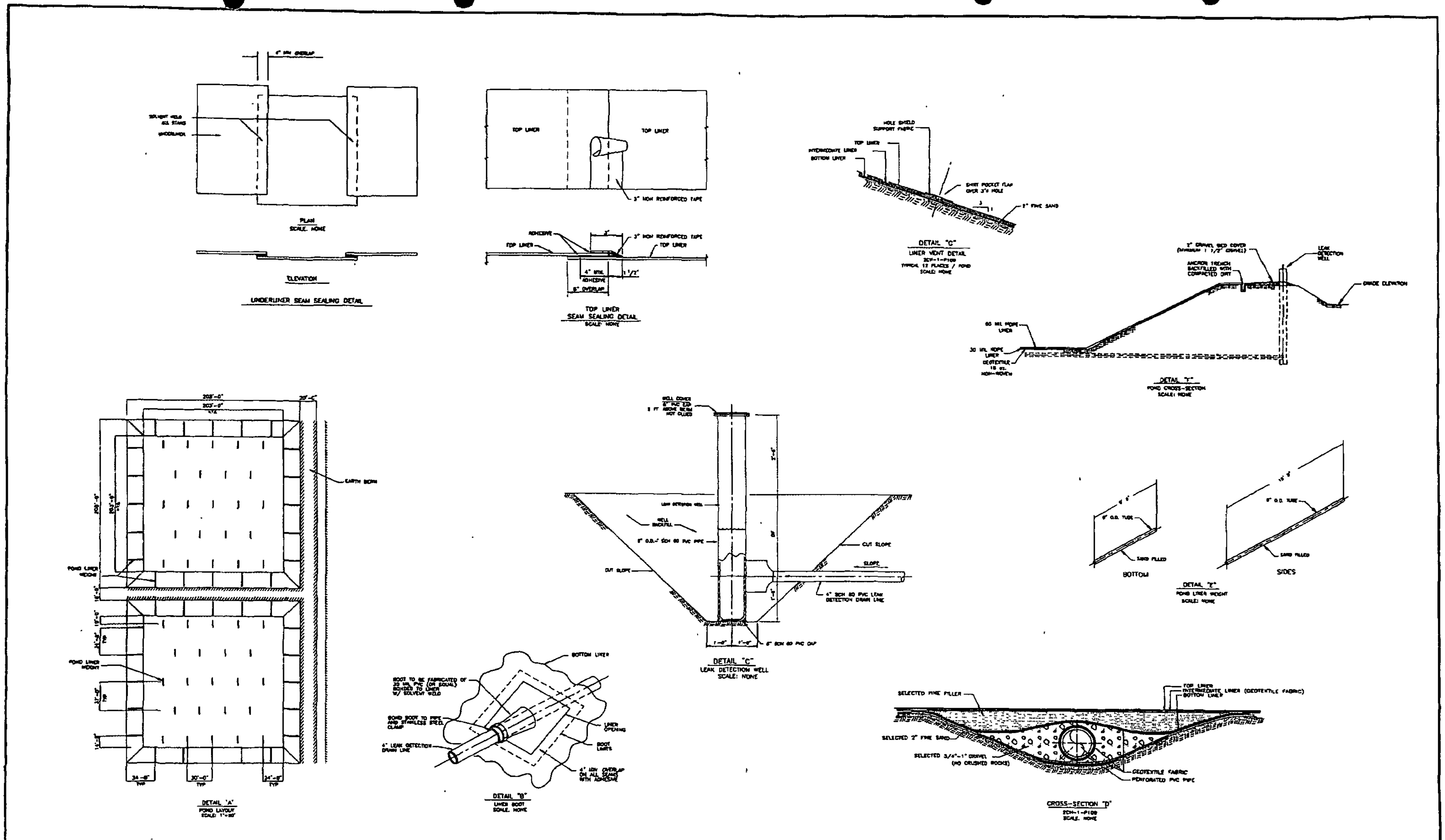
P. S. Marquez

Patrick Marquez
Compliance Engineer

cc:

w/attachment
Denny Foust (NMOCD)
John Lambdin (EPNG)
Lyndell Smith (EPNG)
Vince Medrano (EPNG)

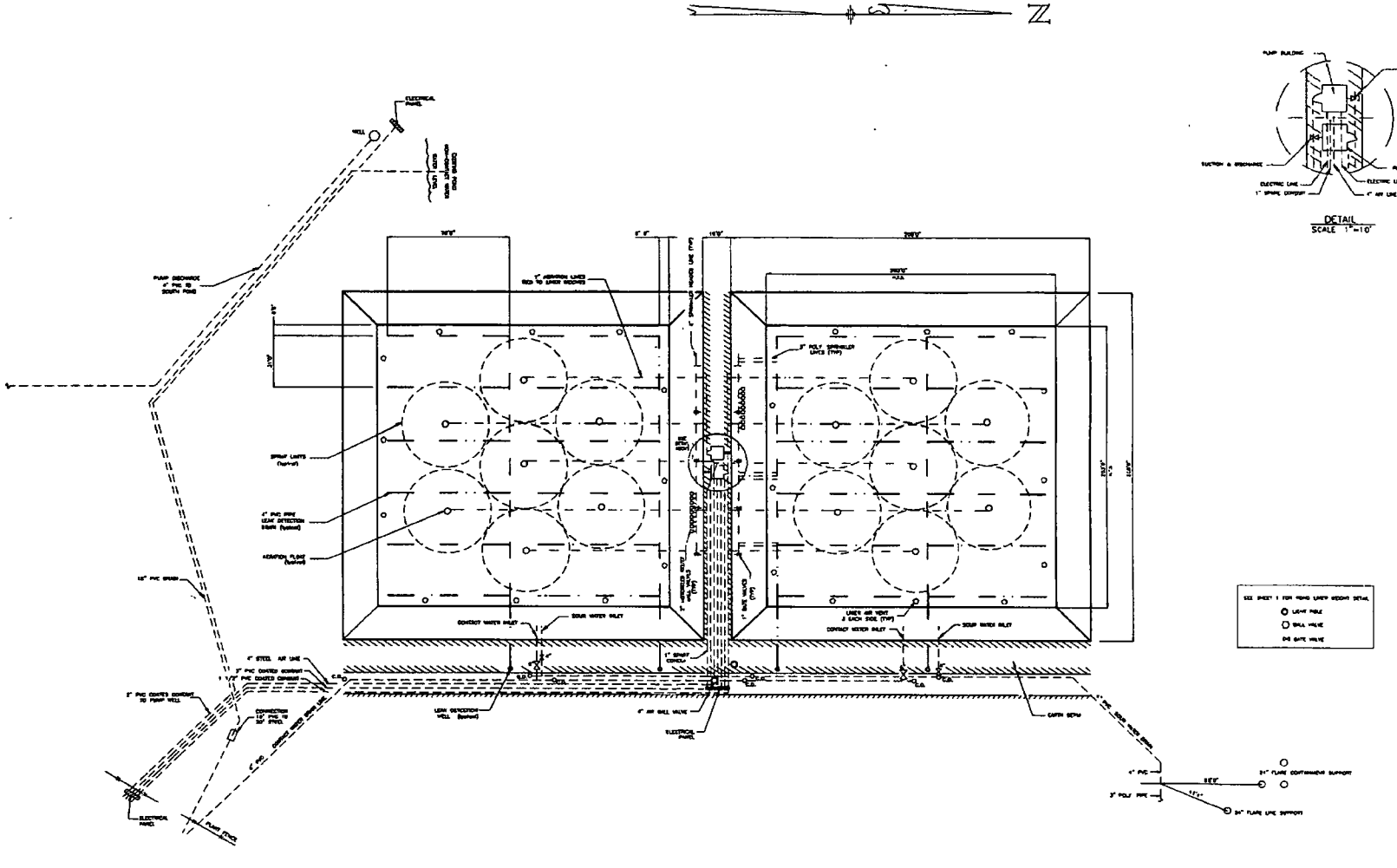
w/o attachments (EPNG)
Richard Carr
David Hall
Bob Yungert
Sandra Miller/David Bays/ File:5212 Regulatory



El Paso Natural Gas Company

CHACO PLANT
EVAPORATION PONDS
AS-BUILT DETAILS

REFERENCE DRAWINGS	2CH-1-P108 — CHACO PLANT - EVAP. PONDS - AS BUILTS
DATE	03/22/95
COMPUTER FILE NAME	2CH1P108
SCALE	SHOWN
W.O.	13635
DWG. NO	2CH-1-P108



LEGEND

DWG. NO.	TITLE
2CH-1-P108	CHACO PLANT - ENVIR. PONDS AS-BUILT SURVEY

REFERENCE DRAWINGS

NO.	DATE	BY	DESCRIPTION	W.O.	APP.	PRT/SEP	DATE	TO	W.O.

REVISIONS — PRINT RECORD

ENG. RECORD		DATE
DRAFTING		
DESIGN		
COMPUTER AIDED DRAFTING	BL	03/17/95
CHECKED		
PROJECT APPROVAL		
DESIGN APPROVAL	AEC	5/3/95
COMPUTER DATE NAME	2CH1P109	

El Paso NATURAL GAS COMPANY

CHACO PLANT
EVAPORATION PONDS
AS-BUILT

SCALE: 1"=30'
W.O.: L8435
DWG. NO. 2CH-1-P109
REV.

CHACO PLANT DOUBLE LINED
CONTACT WASTEWATER DISPOSAL POND

I. Type of Operation

The purpose of the lined ponds is to contain contact wastewater from the two new skimmers and new oil/water separator installed at Chaco Plant in Fall 1993.

II. Local Representative

Mr. David Hall
Field Services Compliance Manager
El Paso Natural Gas Company
P.O. Box 1492
El Paso, TX 79978
(915) 541-3531

III. Location of Double Lined Ponds

Chaco Plant
895 County Road 7100
Section 16, Township 26N, Range 12W
San Juan County, New Mexico
Approximately 20 miles south of Farmington

IV. Engineering Design

A. Surface Impoundment

Type of Effluent Stored :	Contact Wastewater
Volume of Effluent Stored :	Each pond contains approximately 48,605 barrels
Area:	Inside Top of Berm is 208 feet by 208 feet Bottom of Berm is 168 feet by 168 feet
Volume:	The pond was sized for an inlet flow of 12 gallons per minute.
Depth:	Eight feet at full water mark. Ten feet overall.
Slope of Pond Sides:	3:1 on outside and 2:1 on inside
Sub-Grade Description:	Native sandy loam. The soil will be wetted, if necessary, and compacted by rolling or tamping as required to provide a stable foundation for the structure.
Top Liner Type:	The top liner will be a minimum 30 mil thickness and one of the following : -Hypalon 30 HP6 or equivalent -Shelter-Rite 8130 X R5 or equivalent -Flopseal Reinforce Liner - 30 CP 6 or equivalent -Gundle High Density Polyethylene- 60 mil or equivalent

Bottom Liner Type:	The bottom liner will be one of the following: -Oil resistant PVC-20 mil or equivalent -High Density Polyethylene- 20 mil or equivalent -Chlorinated Polyethylene- 20 mil or equivalent -Chlorosulfonated Polyethylene- 20 mil or equivalent
Intermediate Liner:	Fibertex Grade " 600 " Geotextile or equivalent
Coarse Filter Cover:	Mirafi "140 " drainage fabric or equivalent.
Top Liner Thickness:	Minimum 30 mil
Bottom Liner Thickness:	Minimum 20 mil
Compatibility of Liner & Effluent:	A liner will be chosen that is compatible with the effluent .
Freeboard:	Two feet.
Runoff/Runon Protection:	The pond will located approximately 1 1/2 feet above surrounding terrain. The final area around the pond will be graded to prevent stormwater runoff into the pond.

B. Design and Construction

1. Location

This pond will not be located in any water course, lakebed, sink-hole, or other depression.

2. Design and Construction

a. The evaporation pond was designed and will be constructed to provide the minimum evaporative surface area needed for the maximum yearly volume of liquid to be discharged to the pond. The design was based on local climatological data. Special care was taken when calculating the pond volume to account for the decrease in the evaporation rate during the winter months.

b. The design freeboard allowance will be two feet over the estimated high water level in order to prevent overtopping due to wave action.

c. The pond will be constructed so that the inside grade of the levee is no steeper than 2:1. Levees will have an outside grade no steeper that 3:1.

d. The top of the levees shall be level and shall be at least eighteen inches wide.

e. An enhanced evaporation system will be operated and designed so that water does not leave the bermed area. A pump located on the bank of the pond with about 10 horsepower motor will circulate water through a PVC piping system with umbrella head sprayers for each pond.

f. Upon completion of construction "as-built" completion diagrams certified by a registered professional engineer will be submitted including the locations and top-of-pipe elevations of leak detection wells.

3. Synthetically Lined Evaporation Ponds

a. Materials

The synthetic materials used shall be impermeable and flexible.

The top liner will be a minimum 30 mil thickness and will have good resistance to tears or punctures.

The liner will be resistant to hydrocarbons, salts, and acidic and alkaline solutions. The liner will be resistant to ultraviolet light.

The disposal pond shall incorporate a double liner system with a leak detection system installed between the primary and secondary liner.

b. Leak Detection System

(1) The Aztec OCD office will be notified at least 24 hours in advance of the scheduled installation of the primary liner to afford the opportunity for a Division representative to inspect the leak detection system.

(2) A drainage and sump system will be used with a network of slotted or perforated drainage pipes between the primary and secondary liners. The network shall be of sufficient density so that no point in the pond bed is more that twenty feet (20') from such drainage pipe or lateral thereof. The material, 3/4" to 1" gravel, will be placed between the pipes and laterals and is sufficiently permeable to allow transport of the fluids to the drainage pipe. The slope for all drainage lines and laterals will be at least six inches (6") per fifty feet (50'). The slope of the pond bed will also conform to these values to assure fluid flow towards the leak detection system. The drainage pipe shall convey any fluids to a corrosion-proof sump located outside the perimeter of the pond.

c. Preparation of Pond Bed for Installation of Liners

(1) The bed of the pond and inside grade of the levee will be smooth and compacted, free of holes, rocks, stumps, clods, or any other debris which may rupture the liner. The proposed area of the pond is not rocky.

(2) A trench will be excavated on the top of the levee the entire perimeter of the pond for the purpose of anchoring flexible liners. This trench shall be located at least 9 inches from the slope break and will be at least 12 inches deep.

(3) The liner will rest smoothly on the pond bed and the inner face of the levees, and will be sufficient size to extend down to the bottom of the anchor trench and come back out greater than two inches from the trench on the side furthest from the pond.

(4) Native soil will be used an anchor and will be placed over the liner in the anchor trench and the trench back-filled. The anchor trench will extend the entire perimeter of the pond. All swelling soils (soils with plasticity index of 20 or more) will be sprinkled as required to provide not less than 98% nor more than 102% of the maximum density as determined in accordance with ASTM D698. Field density determinations will be made in accordance with ASTM 2922, ASTM 2167, or ASTM 1556.

4. Fences, Signs, and Netting

a. A ponds will be located within the Chaco Plant fenced area. The Chaco Plant fence was constructed so as to prevent livestock from entering the facility area.

b. El Paso Natural Gas Company respectfully requests an exception to Division Order R-8952. Under normal operating conditions this pond would not contain oil and thus would not constitute a water fowl hazard. If any oil or hydrocarbons reach this facility the following measures will be followed : In 72 hours from discovery, measures to remove the oil will be initiated.

5. Affirmation

I hereby certify that I am familiar with the information contained in and submitted with this surface impoundment plan for Chaco Plant and that such information is true, accurate, and complete to the best of my knowledge and belief.

Anu Pundari — 8/16/94

Anu Pundari
Sr. Compliance Engineer

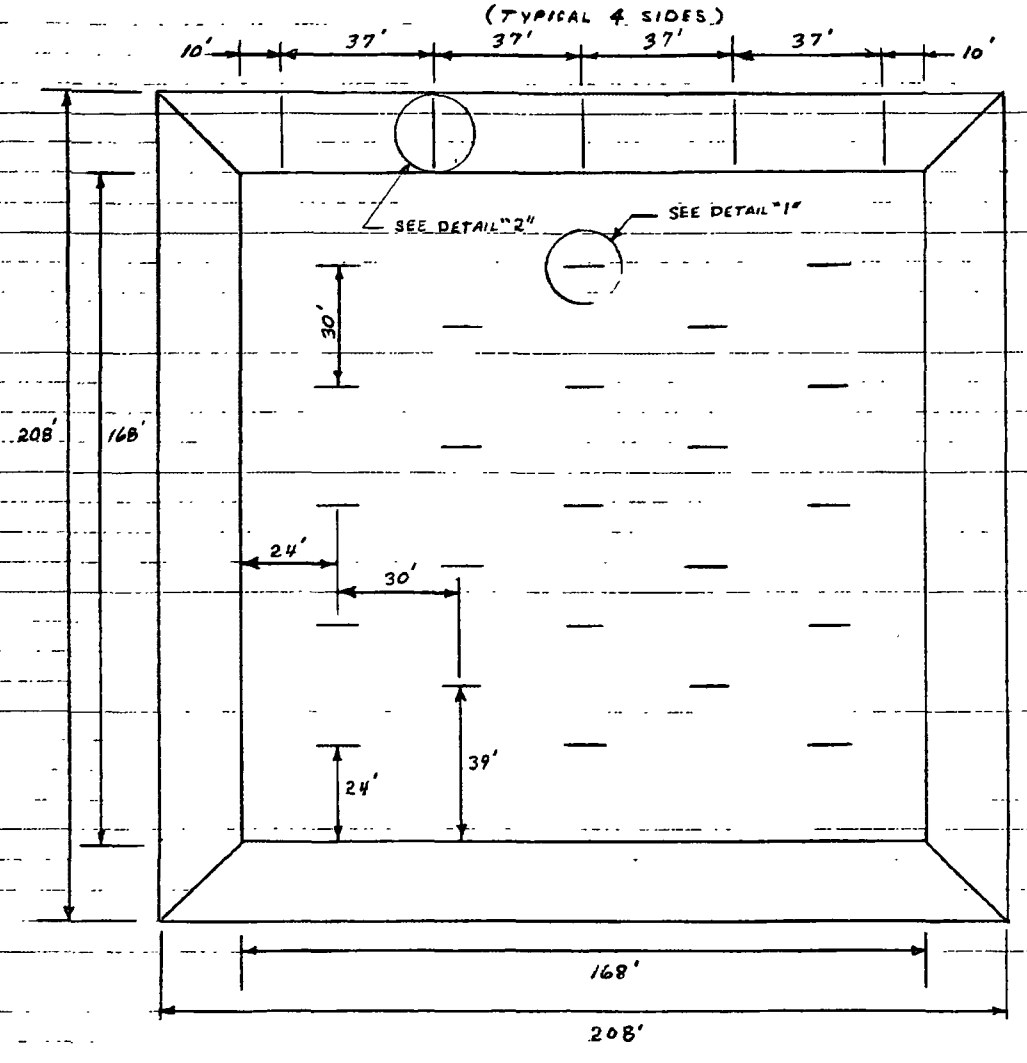
Date

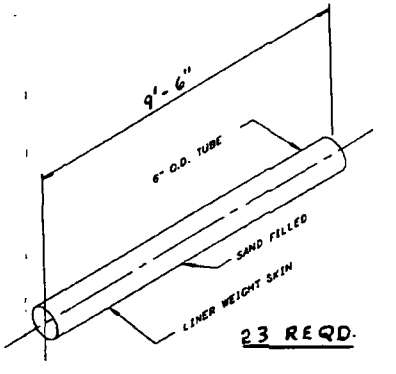
Form 7-171 (2-65)

ENGINEERING ANALYSIS

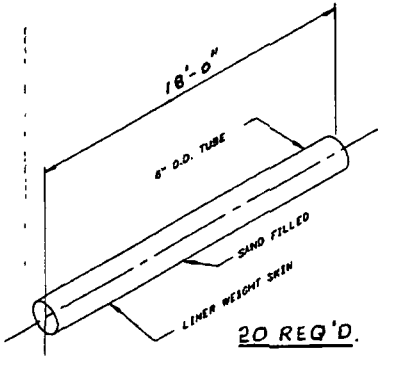
Date 8/11/94
Preliminary
Final
By Chk

PROJECT CHACO LINED PONDS SKETCH #4
SUBJECT POND LINER WEIGHTS
POND BOTTOM & SIDES (2 REQ'D.)





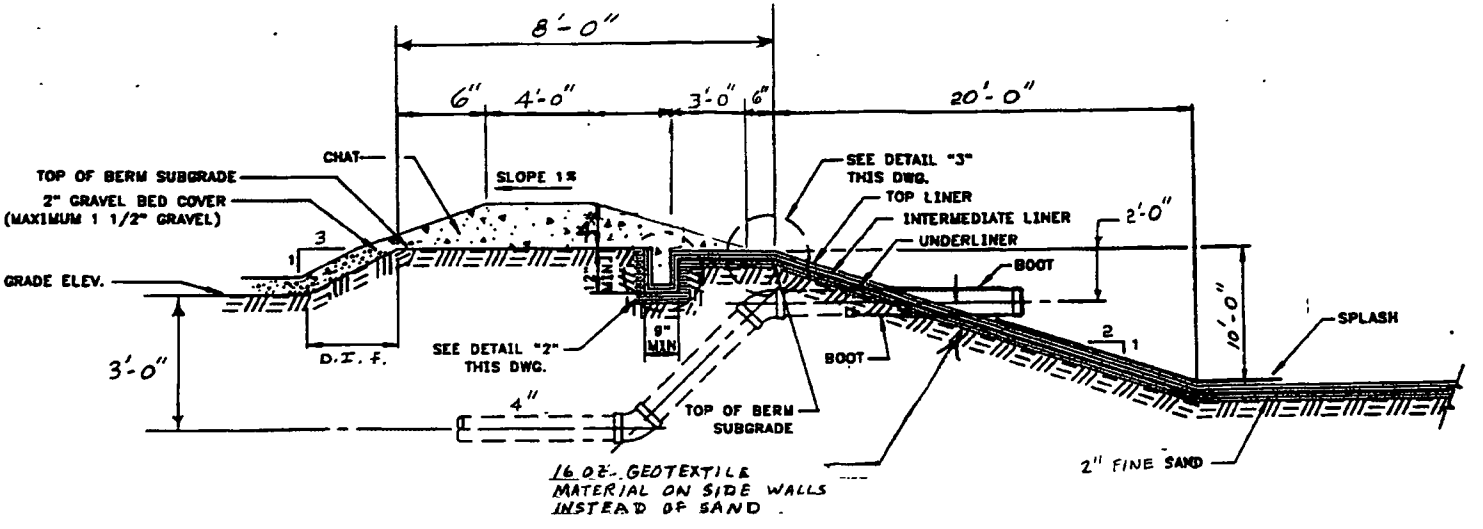
DETAIL "1"
POND LINER WEIGHT
SCALE: NONE



DETAIL "2"
POND LINER WEIGHT
SCALE: NONE

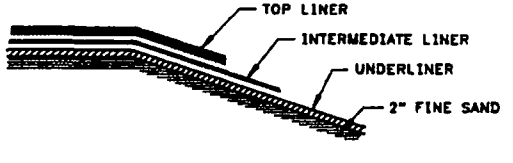
CHACO LINED POND SKETCH #5

8/11.74



POND INLET

SCALE: NONE



DETAIL "3"

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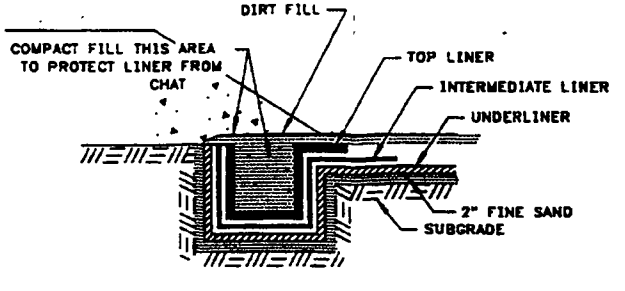
SCALE: NONE



DETAIL "2"

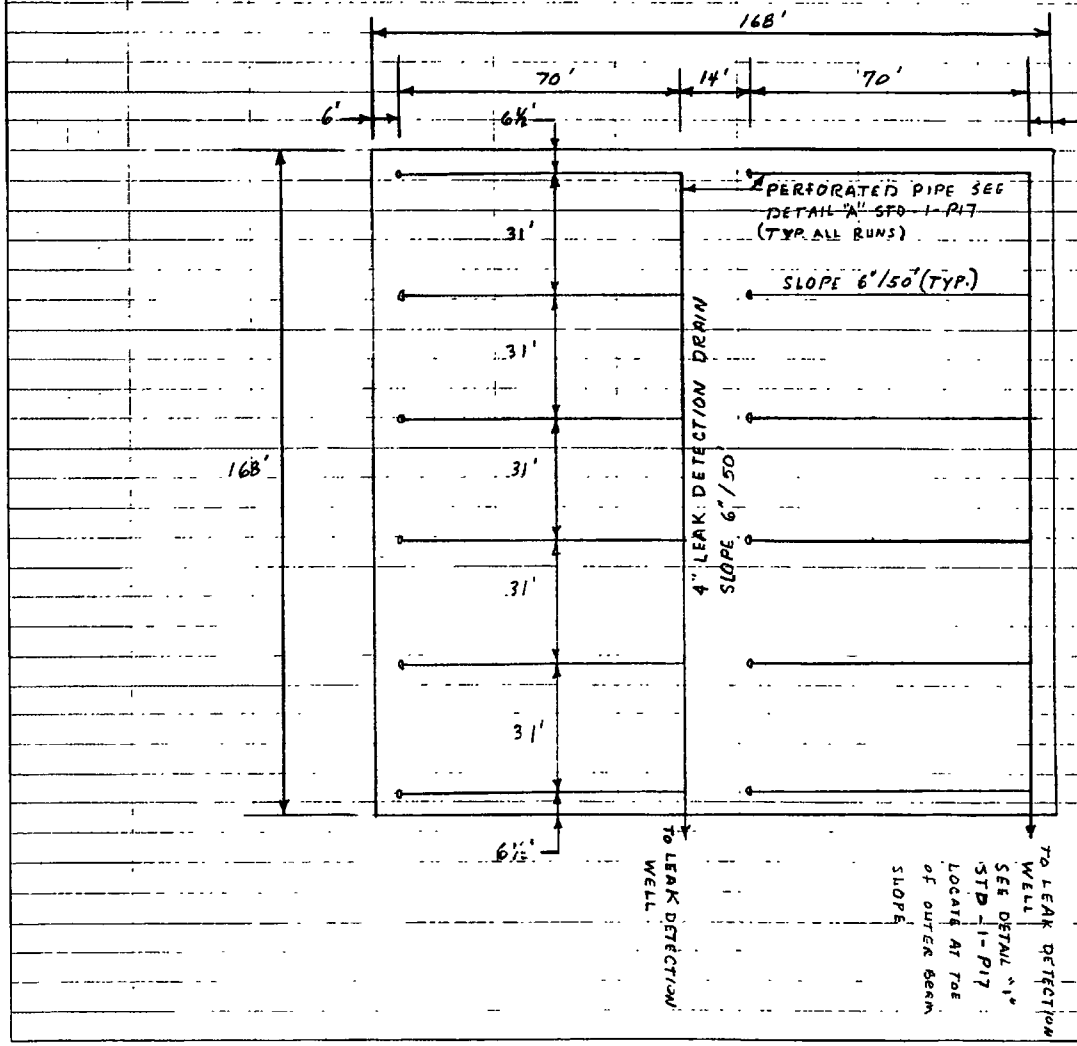
THIS DWG.
SCALE: NONE

Form 7-171 (2-65)

ENGINEERING ANALYSIS

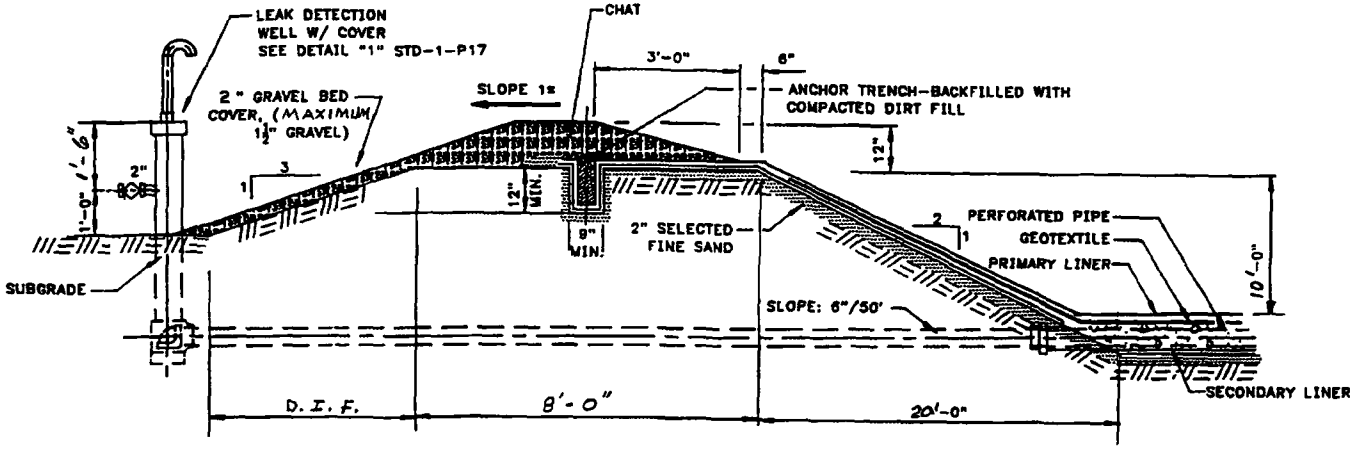
Sheet No. ____
Date 8/11/94
Preliminary ____
Final ____
By ____ Chk. ____

PROJECT CHACO LINED PONDS SKETCH #3
SUBJECT LEAK DETECTION SYSTEM
LINER BOTTOM (2 REQUIRED)



NOTE: ALL CONNECTIONS THROUGH PRIMARY LINER OR SECONDARY LINERS SHALL HAVE A LINER BOOT DETAIL "B" STD-1-P17

(2) 4" POND INLETS
COMPLETE WITH SPASH GUARD
INLET @ 2' BELOW TOP OF BERM
TIE TO BOOT - EXTEND 3'-0"
INTO POND BOTTOM
WIDTH AT BOTTOM 9'-0"



SECTION "A-A"

SCALE: NONE

NO.	DATE	BY	DESCRIPTION	W.O.	APP.
			REVISIONS		

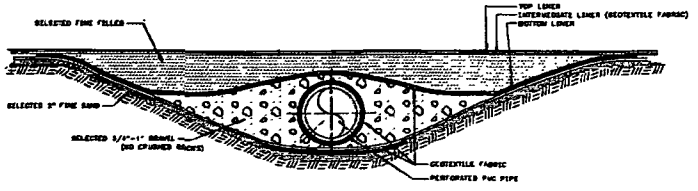
PRT.	SEP.	DATE	TO	W.O.
			PRINT RECORD	

ENG. RECORD		DATE
DRAFTING DESIGN	JN	1/26/87
COMPUTER GRAPHICS	MD	6/29/87
CHECKED		
PROJECT APPROVAL		
DESIGN APPROVAL		
COMPUTER SAVE NAME	STD117	

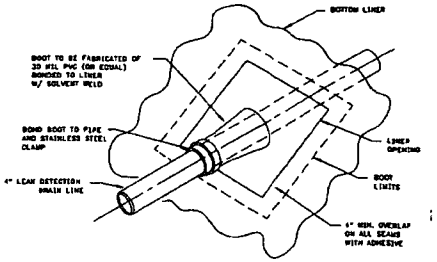
El Paso NATURAL GAS COMPANY

EVAPORATION POND
PLANS AND SECTIONS

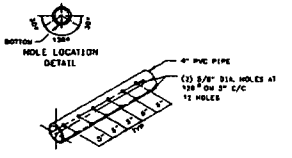
SCALE: NOTED	DWG. NO. STD-1-P16	REV. 1
W.O.:		



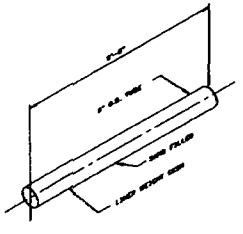
SECTION "B-B"
SCALE: N.T.S.



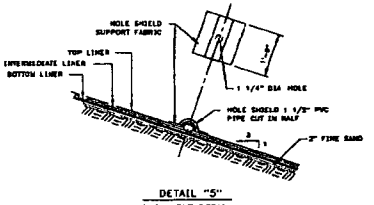
DETAIL "B"
LINER BOOT
SCALE: NONE
STD-1-P16



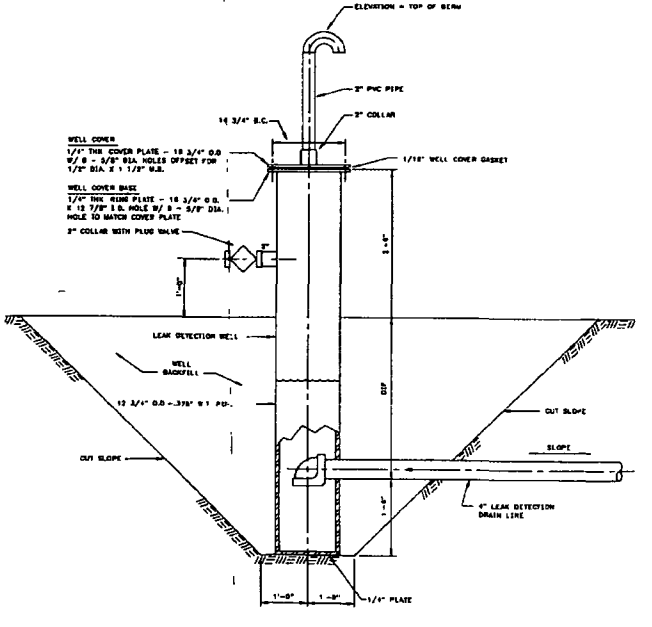
DETAIL "A"
PERFORATED PIPE
SCALE: NONE



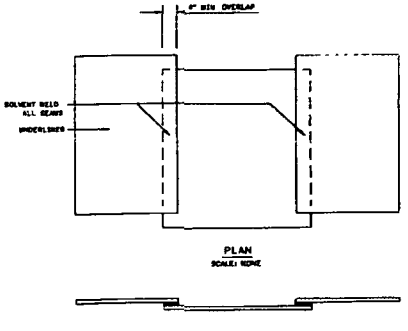
DETAIL #4
POND LINER WEIGHT
STD-1-P16
SCALE: NONE
SEE SKETCH 6



DETAIL "5"
LINER VENT DETAIL
STD-1-P16
TYPICAL 18 PLACES
SCALE: NONE



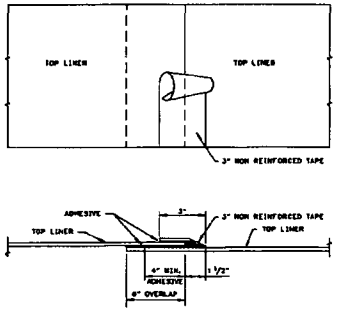
DETAIL "1"
LEAK DETECTION WELL
SCALE: NONE



PLAN
SCALE: NONE

ELEVATION

UNDERLINER SEAM SEALING DETAIL



TOP LINER
SEAM SEALING DETAIL
SCALE: NONE

LEGEND

STD-1-P17	EVAPORATION POND
DWG. NO	TITLE

REFERENCE DRAWINGS

NO	DATE	BY	DESCRIPTION

REVISIONS

W.O.	APP.	PMT. REF.	DATE	TO
W.O.				

PRINT RECORD

ENG. RECORD		DATE
DRAFTING DESIGN	JN	8/17/87
COMPUTER GRAPHICS	MD	8/17/87
CHECKED		
PROJECT APPROVAL		
DESIGN APPROVAL		
COMPUTER SAVE NAME	STD144	

El Paso
NATURAL GAS COMPANY

EVAPORATION POND
MISCELLANEOUS SECTIONS AND DETAILS

SCALE: NOTED	DWG NO	STD-1-P17	REV
W.O.			

Bill Richardson
Governor
Joanna Prukop
Cabinet Secretary

GW-071
PERMITS

July 14, 2009

Mr. Clay Roesler
P.O. Box 2521
Houston, Texas 77252-2521

Re: Discharge Permit Renewal
Chaco Gas Plant (GW-071)
SE/4 Section 16, Township 26 North, Range 12 West, NMPM
San Juan County, New Mexico

Dear Mr. Roesler:

Pursuant to Water Quality Control Commission (WQCC) Regulations 20.6.2.3104 - 20.6.2.3114 NMAC, the Oil Conservation Division (OCD) hereby approves **Enterprise Field Services, LLC./Enterprise Products Operating LLC.** discharge permit for the above referenced site contingent upon the conditions specified in the enclosed **Attachment to the Discharge Permit.** Enclosed are two copies of the conditions of approval. **Please sign and return one copy to the New Mexico Oil Conservation Division (OCD) Santa Fe Office within 30 days of receipt of this letter including permit fees.**

Please be advised that approval of this permit does not relieve the owner/operator of responsibility should operations result in pollution of surface water, ground water or the environment. Nor does approval of the permit relieve the owner/operator of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If you have any questions, please contact Leonard Lowe of my staff at (505-476-3492) or E-mail leonard.lowe@state.nm.us. On behalf of the staff of the OCD, I wish to thank you and your staff for your cooperation during this discharge permit review.

Sincerely,

Glenn von Gonten
Acting Environmental Bureau Chief

Attachments-1
xc: OCD District Office

ATTACHMENT- DISCHARGE PERMIT APPROVAL CONDITIONS

1. **Payment of Discharge Plan Fees:** All discharge permits are subject to WQCC Regulations. Every billable facility that submits a discharge permit application will be assessed a filing fee of $100.00, plus a flat fee (*see* WQCC Regulation 20.6.2.3114 NMAC). The Oil Conservation Division ("OCD") has received the required $100.00 filing fee. The flat fee for a gas plant is $4000.00. Return a signed copy of the permit conditions within 30 days. Checks should be made out to the New Mexico Water Quality Management Fund.

2. **Permit Expiration, Renewal Conditions and Penalties:** Pursuant to WQCC Regulation 20.6.2.3109.H.4 NMAC, this permit is valid for a period of five years. **The permit will expire on May 18, 2012** and an application for renewal should be submitted no later than 120 days before that expiration date. Pursuant to WQCC Regulation 20.6.2.3106.F NMAC, if a discharger submits a discharge permit renewal application at least 120 days before the discharge permit expires and is in compliance with the approved permit, then the existing discharge permit will not expire until the application for renewal has been approved or disapproved. ***Expired permits are a violation of the Water Quality Act {Chapter 74, Article 6, NMSA 1978} and civil penalties may be assessed accordingly.***

3. **Permit Terms and Conditions:** Pursuant to WQCC Regulation 20.6.2.3104 NMAC, when a permit has been issued, the owner/operator must ensure that all discharges shall be consistent with the terms and conditions of the permit. In addition, all facilities shall abide by the applicable rules and regulations administered by the OCD pursuant to the Oil and Gas Act, NMSA 1978, Sections 70-2-1 through 70-2-38.

4. **Owner/Operator Commitments:** The owner/operator shall abide by all commitments submitted in its December 2008 discharge plan application, including attachments and subsequent amendments and these conditions for approval. Permit applications that reference previously approved plans on file with the division shall be incorporated in this permit and the owner/operator shall abide by all previous commitments of such plans and these conditions for approval.

5. **Modifications:** WQCC Regulation 20.6.2.3107.C and 20.6.2.3109 NMAC addresses possible future modifications of a permit. The owner/operator (discharger) shall notify the OCD of any facility expansion, production increase or process modification that would result in any significant modification in the discharge of water contaminants. The Division Director may require a permit modification if any water quality standard specified at 20.6.2.3103 NMAC is being or will be exceeded, or if a toxic pollutant as defined in WQCC Regulation 20.6.2.7 NMAC is present in ground water at any place of withdrawal for present or reasonably foreseeable future use, or that the Water Quality Standards for Interstate and Intrastate streams as specified in 20.6.4 NMAC are being or may be violated in surface water in New Mexico.

6. **Waste Disposal and Storage:** The owner/operator shall dispose of all wastes at an OCD-approved facility. Only oil field RCRA-exempt wastes may be disposed of by injection in a Class II well. RCRA non-hazardous, non-exempt oil field wastes may be disposed of at an OCD-approved facility upon proper waste determination pursuant to 40 CFR Part 261. Any waste stream that is not listed in the discharge permit application must be approved by the OCD on a case-by-case basis.

A. OCD Part 35 Waste: Pursuant to OCD Part 35 (19.15.35.8 NMAC) disposal of certain non-domestic waste without notification to the OCD is allowed at NMED permitted solid waste facilities if the waste stream has been identified in the discharge permit and existing process knowledge of the waste stream does not change.

B. Waste Storage: The owner/operator shall store all waste in an impermeable bermed area, except waste generated during emergency response operations for up to 72 hours. All waste storage areas shall be identified in the discharge permit application. Any waste storage area not identified in the permit shall be approved on a case-by-case basis only. The owner/operator shall not store oil field waste on-site for more than 180 days unless approved by the OCD.

7. Drum Storage: The owner/operator must store all drums, including empty drums, containing materials other than fresh water on an impermeable pad with curbing. The owner/operator must store empty drums on their sides with the bungs in place and lined up on a horizontal plane. The owner/operator must store chemicals in other containers, such as tote tanks, sacks, or buckets on an impermeable pad with curbing.

8. Process, Maintenance and Yard Areas: The owner/operator shall either pave and curb or have some type of spill collection device incorporated into the design at all process, maintenance, and yard areas which show evidence that water contaminants from releases, leaks and spills have reached the ground surface.

9. Above Ground Tanks: The owner/operator shall ensure that all aboveground tanks have impermeable secondary containment (e.g., liners and berms), which will contain a volume of at least one-third greater than the total volume of the largest tank or all interconnected tanks. The owner/operator shall retrofit all existing tanks before discharge permit renewal. Tanks that contain fresh water or fluids that are gases at atmospheric temperature and pressure are exempt from this condition.

10. Labeling: The owner/operator shall clearly label all tanks, drums, and containers to identify their contents and other emergency notification information. The owner/operator may use a tank code numbering system, which is incorporated into their emergency response plans.

11. Below-Grade Tanks/Sumps and Pits/Ponds.

A. All below-grade tanks and sumps must be approved by the OCD prior to installation and must incorporate secondary containment with leak detection into the design. The owner/operator shall retrofit all existing systems without secondary containment and leak detection before discharge permit renewal. All existing below-grade tanks and sumps without secondary containment and leak detection must be tested annually or as specified herein. Systems that have secondary containment with leak detection shall have a monthly inspection of the leak detection system to determine if the primary containment is leaking. Small sumps or depressions in secondary containment systems used to facilitate fluid removal are exempt from these requirements if fluids are removed within 72 hours.

B. All pits and ponds, including modifications and retrofits, shall be designed by a certified registered professional engineer and approved by the OCD prior to installation. In general, all pits or ponds shall have approved hydrologic and geologic reports, location, foundation, liners, and secondary containment with leak detection, monitoring and closure plans. All pits or ponds shall be designed, constructed and operated so as to contain liquids and solids in a manner that will protect fresh water, public health, safety and the environment for the foreseeable future. The owner/operator shall retrofit all existing systems without secondary containment and leak detection before discharge permit renewal.

C. The owner/operator shall ensure that all exposed pits, including lined pits and open top tanks (8 feet in diameter or larger) shall be fenced, screened, netted, or otherwise rendered non-hazardous to wildlife, including migratory birds.

D. The owner/operator shall maintain the results of tests and inspections at the facility covered by this discharge permit and available for OCD inspection. The owner/operator shall report the discovery of any system which is found to be leaking or has lost integrity to the OCD within 15 days. The owner/operator may propose various methods for testing such as pressure testing to 3 pounds per square inch greater than normal operating pressure and/or visual inspection of cleaned tanks and/or sumps, or other OCD-approved methods. The owner/operator shall notify the OCD at least 72 hours prior to all testing.

12. Underground Process/Wastewater Lines:

A. The owner/operator shall test all underground process/wastewater pipelines at least once every five (5) years to demonstrate their mechanical integrity, except lines containing fresh water or fluids that are gases at atmospheric temperature and pressure. Pressure rated pipe shall be tested by pressuring up to one and one-half times the normal operating pressure, if possible, or for atmospheric drain systems, to 3 pounds per square inch greater than normal operating pressure, and pressure held for a minimum of 30 minutes with no more than a 1% loss/gain in pressure. The owner/operator may use other methods for testing if approved by the OCD.

B. The owner/operator shall maintain underground process and wastewater pipeline schematic diagrams or plans showing all drains, vents, risers, valves, underground piping, pipe type, rating, size, and approximate location. All new underground piping must be approved by the OCD prior to installation. The owner/operator shall report any leaks or loss of integrity to the OCD within 15 days of discovery. The owner/operator shall maintain the results of all tests at the facility covered by this discharge permit and they shall be available for OCD inspection. The owner/operator shall notify the OCD at least 72 hours prior to all testing.

13. Class V Wells: The owner/operator shall close all Class V wells (e.g., septic systems, leach fields, dry wells, etc.) that inject non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes unless it can be demonstrated that ground water will not be impacted in the reasonably foreseeable future. Leach fields and other wastewater disposal systems at OCD-regulated facilities that inject non-hazardous fluid into or above an underground source of drinking water are considered Class V injection wells under the EPA UIC program. Class V wells that inject domestic waste only, must be permitted by the New Mexico Environment Department (NMED).

14. Housekeeping: The owner/operator shall inspect all systems designed for spill collection/prevention and leak detection at least monthly to ensure proper operation and to prevent over topping or system failure. All spill collection and/or secondary containment devices shall be emptied of fluids within 72 hours of discovery. The owner/operator shall maintain all records at the facility and available for OCD inspection.

15. Spill Reporting: The owner/operator shall report all unauthorized discharges, spills, leaks and releases and conduct corrective action pursuant to WQCC Regulation 20.6.2.1203 NMAC and OCD Part 29 (19.15.29 NMAC). The owner/operator shall notify both the OCD District Office and the Santa Fe Office within 24 hours and file a written report within 15 days. The OCD does not consider covering contaminated areas a remediation of the spill/release.

16. OCD Inspections: The OCD performed an inspection of this facility on June 11, 2009. Mr. Don Fernald and Mr. Max Blackwood witnessed the inspection. All photographs referenced below are located in the attachment of this permit. As a result of this, OCD inspection concluded the following:

1. **Photo 1 – 4:** Two lined produced water ponds are located on the east side of the facility grounds and were found to have fluids within their leak detection system. Owner/operator shall immediately investigate the cause of fluids within the system. The second pond, (photo 3) has oil present. Owner/operator shall remove any oil from the pond immediately and properly dispose of.
2. **Photo 5 – 6:** An unused below-grade tank is empty and its leak detection system was verified dry. Owner/Operator shall identify tank as not in use.
3. **Photo 7:** Owner/operator shall identify this conduit and its purpose. At the time of inspection it was unidentifiable.
4. **Photo 8 – 13:** Several sumps were holding liquids and had sediment. This was previously noted in the July 17, 2002 OCD inspection. All sumps are meant to catch fluids and must be drained within 72 hours. Owner/operator shall keep these sumps cleaned.
5. **Photo 14 – 15:** The secondary corner sealants were deteriorating. Owner/operator shall fix all breaches within the containment.
6. **Photo 16 – 17:** This air compressor below-grade tank had fluids within its leak detection system. Owner/operator shall determine why fluids are collecting in the leak detection system and verify tank integrity. The discharge plan application noted in section 10. (Inspection, Maintenance and Reporting) that all tanks were to be inspected on a monthly basis. At the time of inspection OCD determines that these leak detection systems had not been inspected. Owner/operator shall, record and report any releases of these below-grade tanks on a routine basis.
7. **Photo 18 – 22:** These below-grade tanks were verified to have no fluids within its leak detection system. BGT, (photo 10) had no covering. Owner/operator shall properly cover all below grade tanks as to prevent unnecessary accumulation of fluids and overflow.
8. **Photo 23 – 26:** The staging area for used filter drainage had standing fluids and containment problems. Photo 26 shows fluids from the containment area seeping through the blocks. Owner/operator shall remove the fluids and clean the containment

area and then investigate the failed integrity of the containment. Owner/operator shall submit all findings and conclusions to the OCD.

9. **Photo 27 – 31:** There were several areas with visible stained soils within the facility's yard. Owner/operator shall follow best management practices to prevent such future discharges. When such discharges occur owner/operator shall address them in accordance with the discharge plan application. These stained areas were noted in the July 17, 2002 inspection.
10. **Photo 33 – 38:** There are two unlined ponds on the north part of the facility and an unused lined pond adjacent to the two. After the July 17, 2002 inspection, OCD required the owner/operator to submit a closure plan for the contact water pond, but we have not received it. Owner/operator will submit a closure plan for the unused lined pond in photo 35 – 37.
11. **Photo 38 – 39:** There were several piles of spent carbon filter media lying on the ground. OCD was informed that they have been there for an extended period of time. Condition 6.B indicates that no waste shall be on site greater than 180 days unless granted permission by the OCD. Owner/operator shall dispose of all waste in accordance with its permit.

Enterprise shall resolve all **items by September 4, 2009** and submit their findings to the OCD for review.

17. **Storm Water:** The owner/operator shall implement and maintain run-on and runoff plans and controls. The owner/operator shall not discharge any water contaminant that exceeds the WQCC standards specified in 20.6.2.3101 NMAC or 20.6.4 NMAC (Water Quality Standards for Interstate and Intrastate Streams) including any oil sheen in any stormwater run-off. The owner/operator shall notify the OCD within 24 hours of discovery of any releases and shall take immediate corrective action(s) to stop the discharge.

18. **Unauthorized Discharges:** The owner/operator shall not allow or cause water pollution, discharge or release of any water contaminant that exceeds the WQCC standards listed in 20.6.2.3101 NMAC or 20.6.4 NMAC (Water Quality Standards for Interstate and Intrastate Streams) unless specifically listed in the permit application and approved herein. ***An unauthorized discharge is a violation of this permit.***

19. **Vadose Zone and Water Pollution:** The owner/operator shall address any contamination through the discharge permit process or pursuant to WQCC 20.6.2.4000-.4116 NMAC (Prevention and Abatement of Water Pollution). The OCD may require the owner/operator to modify its permit for investigation, remediation, abatement, and monitoring requirements for any vadose zone or water pollution. Failure to perform any required investigation, remediation, abatement and submit subsequent reports will be a violation of the permit.

20. **Additional Site Specific Conditions:** N/A

21. **Transfer of Discharge Permit (WQCC 20.6.2.3111)** Prior to any transfer of ownership, control, or possession (whether by lease, conveyance or otherwise) of a facility with a discharge permit, the transferor shall notify the transferee in writing of the existence of the discharge permit, and shall deliver or send by certified mail to the department a copy of such written

notification, together with a certification or other proof that such notification has in fact been received by the transferee.

Upon receipt of such notification, the transferee shall have the duty to inquire into all of the provisions and requirements contained in such discharge permit, and the transferee shall be charged with notice of all such provisions and requirements as they appear of record in the department's file or files concerning such discharge permit. The transferee (new owner/operator) shall sign and return an original copy of these permit conditions and provide a written commitment to comply with the terms and conditions of the previously approved discharge permit.

22. **Closure Plan and Financial Assurance:** Pursuant to 20.6.2.3107 NMAC an owner/operator shall notify the OCD when any operations of the facility are to be discontinued for a period in excess of six months. Prior to closure, or as a condition of this permit, or request from the OCD, the operator will submit an approved closure plan, modified plan, and/or provide adequate financial assurance.